



**Indian Institute of Insolvency Professionals
of ICAI (IIPI)**

**Reasons and Remedies for Under-utilization of the Pre-Packaged
Insolvency Resolution Process (PPIRP) in India**

A Research Report sponsored by IIPI

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FOREWORD

The Research Committee of the Indian Institute of Insolvency Professionals of ICAI (IIPI) is pleased to present its Research Report on “Efficacy of Insolvency Law in India Vs other countries” developed by Dr Uday K Jagannathan, in association with Dr KM Sharath Kumar and Ms. Savitha Kulkarni and sponsored by IIIPI. This report was released on the occasion of the 1st Research Web conference conducted by IIIPI on 19th September 2025.

Dr. Uday Jagannath is an Associate Professor at Ramaiah University of Applied Sciences, Bangalore. He has completed his Ph.D. from MSRUAS, Bangalore and MBA from University of California, Los Angeles, USA. He has an experience of 20 years of in Industry and 15 years in Academics.

This study addresses a critical challenge faced by MSMEs in navigating insolvency resolution and highlights key barriers to the adoption of the PPIRP framework.

The report offers a rigorous analysis using Structural Equation Modelling, uncovering root causes such as lack of awareness, valuation concerns, and managerial deficiencies that hinder PPIRP’s wider acceptance. Researchers’ recommendations for enhancing legislative support, improving valuation practices, and building managerial capacity provide a pragmatic roadmap for stakeholders.

We believe this report will serve as a valuable resource for policymakers, regulators, and industry participants aiming to strengthen India’s insolvency framework and support MSMEs in financial distress. The report offers a clear pathway to making PPIRP a more accessible and effective tool for MSMEs in financial distress.

I would like to take this opportunity to express my thanks to Dr. Navrang Saini and CA M. Suresh Kumar IP for reviewing the report and providing their valuable input during the research by the researcher.

I also appreciate the efforts put in by CA. Rahul Madan - Managing Director, CA Leena Aggarwal - Dy Director, and CS Sakshi Aggarwal, in charge of the Research Department of IIIPI for providing their technical and administrative support in bringing out this report.

I am confident that this Research Report will be useful to understand evolving Laws of Insolvency in the world.

Dr. Ashok Kumar Mishra,
Chairman, IIIPI-Governing Board

Date : 19th September 2025

Place: New Delhi

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We also wish to thank all the respondents from the Chartered Accountant and Banking Community, with a special mention of CA Uday Kumar Shetty, Head, Finance and Accounts at Ramaiah University of Applied Sciences. We also acknowledge the support from Insolvency Professionals and Lawyer Community and MSME Owners and Industry Association Leaders community. Finally, we also wish to acknowledge support from our Vice Chancellor, Dr Kuldeep Kumar Raina, of Ramaiah University of Applied Sciences, Bengaluru, India.

Dr. Uday Jagannath
Researcher

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EXECUTIVE SUMMARY

Reasons and Remedies for Under-utilization of the Pre-Packaged Insolvency Resolution Process (PPIRP) in India – A Research Report sponsored by IIIPI (Indian Institute of Insolvency Professionals of ICAI)

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This comprehensive report delves into the underutilization of the Pre-Packaged Insolvency Resolution Process (PPIRP) in India, employing a Structural Equation Modelling (SEM) approach to analyse survey data from various stakeholders in the MSME ecosystem. The study identifies root causes and proposes remedies to enhance the adoption of PPIRP, a crucial mechanism for resolving financial distress among MSMEs.

A. Objective of Research

The main objective of this research is to identify and analyse the 'Reasons and Remedies for Under-utilization of the Pre-Packaged Insolvency Resolution Process in India (hereon PPIRP framework)' with the use of the field survey method of Research, by questioning individuals on the topic(s) and analysing their response, Jackson (2011).

B. Methodology of Research

1. Thorough literature review to assess the state of current literature
2. Fishbone diagram, with an estimation of the causes to Low PPIRP adoption, with detailed sub causes and validation of same in Review Meetings with IIIPI
3. Development of Detailed questionnaire and validation of same in Review meetings with IIIPI
4. Scientific method used to arrive at sample size and validation of same in Review Meetings with IIIPI
5. Use of Structural equation modelling (with justification from literature on its use)
6. Arrival at Path Coefficients for the Latent Variables in 5 above
7. Conclusion of the study based on Path Coefficients arrived at in 6 above

C. Key Findings in Report

1. Assessment of PPIRP Awareness and Perception

The survey reveals a concerning lack of awareness about PPIRP among MSME stakeholders, with respondents perceiving it as new, unproven, and inadequately supported by the legislative framework. This limited understanding hinders the adoption of PPIRP as a viable solution for financial distress.

2. Identification of Root Causes for Underutilization

Through SEM analysis, the study pinpoints several factors contributing to the underutilization of PPIRP. Time constraints, valuation issues, and concerns about transparency emerge as significant barriers. Additionally, managerial deficiencies, such as weak stakeholder attention and integrity issues, further impede the effective implementation of PPIRP.

3. Creditor Perspective and Firm Valuation

The research highlights the importance of addressing creditor perspectives in PPIRP implementation. Creditors' concerns regarding firm valuation, estimation of cash flow, firm risk level, and relative valuation significantly impact their willingness to support PPIRP. The study emphasizes the need for accurate and reliable valuation methods to instill confidence among creditors.

4. Managerial Capability and Deficiency in Plan

The study underscores the crucial role of managerial capability in the successful execution of PPIRP. Respondents express concerns about the managerial ability to run insolvent firms, manage stakeholder interests, and execute plans effectively. Deficiencies in planning, such as inadequate attention to creditor needs and unrealistic firm valuation constraints, further hinder the adoption of PPIRP.

D. Key Recommendations by Researcher

To address the identified root causes, the report proposes several remedies. These include:

- 1. Enhancing Awareness and Education:** Disseminating information about PPIRP's benefits and processes through targeted campaigns and training programs.
- 2. Strengthening Legislative Framework:** Revising the PPIRP framework to address concerns about time constraints, valuation issues, and transparency.
- 3. Improving Valuation Practices:** Establishing standardized valuation methodologies and training valuers to enhance the accuracy and reliability of firm valuations.
- 4. Developing Managerial Capacity:** Providing training and support to improve managerial capabilities in areas such as stakeholder management, financial planning, and risk assessment.
- 5. Fostering Transparency and Accountability:** Implementing measures to increase transparency in the PPIRP process and hold stakeholders accountable for their actions.

E. Legislative and Administrative changes required

To address the identified root causes, these Legislative and Administrative changes are required:

- 1. Enhancing Awareness and Education:** Mandatory Training Programs for Debtors and Financial/Operational Creditors where benefits of PPIRP can be highlighted
- 2. Improving Valuation Practices:** Proper Training programs on Discounted Cash Flow Valuation, Relative Valuation and Scenario Management can be made mandatory so that the “hair-cut” possibilities are minimized
- 3. Developing Managerial Capacity:** Make Training programs for management, employees and stakeholders so that managerial capabilities are enhanced. Encourage the use of Fractional experts who are good at insolvency situations and can accelerate the process.
- 4. Fostering Transparency and Accountability:** Punish any fraudulent activity and encourage the sharing of information and process throughout the Insolvency process and hold stakeholders accountable for their actions.

Conclusion

The study concludes that the underutilization of PPIRP in India is a multifaceted issue stemming from a lack of awareness, concerns about time constraints and valuation, managerial deficiencies, and creditor perspectives. By addressing these root causes through the proposed remedies, policymakers and stakeholders can enhance the adoption of PPIRP, providing MSMEs with a valuable tool for resolving financial distress and promoting economic recovery.

1. Introduction

Insolvency is the state when a firm or an individual is unable to service the Debt Obligation, according to encyclopedia Britannica.com (2022), and the liabilities of the borrower exceed the total assets. Insolvency can manifest in two forms: Cash Insolvency and Balance Sheet Insolvency. Investopedia.com (2022) states that formal insolvency proceedings of settlement of claims begin only after informal discussions are held between the lender and borrower. Further, the causes of Insolvency stem from a below par system of managing cash, reduction of cash flow from operations and increase in expenses or outflows. Further, causes of Insolvency could originate from poor planning and budgeting, increased cost of wages or input cost of raw material, lawsuits from consumers or employees, selection of competitive products by the consumers, and several other factors. The scope of Insolvency is vast in that it could be localized, or it could be cross-border as discussed in Sikri (2009), who analyzed the court-to-court cooperation model in settling Insolvency claims. According to Chakrabarti (2018), when an insolvent entity has substantial proportion of its assets overseas, there is a gap in the Indian legal framework to address the issues. In their study, Chatterjee, Shaikh, and Zaveri (2016) examine the effects of the revised Insolvency and Bankruptcy Code of 2016. They also create a dataset to address various inquiries concerning the judiciary's performance considering the new legislation. Sengupta and Sharma (2016) document the absence of a well-developed legal framework for Insolvency proceedings in India and point to arbitrage opportunities being exploited by debtors in the absence of strict laws. Further, the authors do a comparative analysis between India, Singapore, and UK to provide insights as to how the Indian legal system can be improved, in the context of Insolvency.

According to the Insolvency and Bankruptcy Board of India (IBBI) Website (2022), the Government of India, in recognizing that the Micro, Small, Medium Enterprises (MSME) are a critical part of the Indian economy and contribute significantly to India's Gross Domestic Product (GDP) as well as employment in India. Therefore, resolutions of financial distress in MSMEs were an important priority. Therefore, based on vide: Presidential promulgation, the Pre-Packaged Insolvency Resolution Process (PPIRP) was initiated. PPIRP is a framework designed for defaults in the magnitude of more than Rs.10 Lakh.

According to Notification S.O. 1543(E) dated 09.04.2021, the Central Government has stipulated that the least default amount of ten lakh rupees applies to PPIRP matters related to a corporate debtor, under Chapter III-A of the Code. The PPIRP framework is a plan which is established between the debtor and creditor(s) before the commencement of a formal corporate insolvency process. According to Rout and Shankar (2022), the PPIRP aims to offer quick resolution, cost-effective solution, and value maximization, job preservation, which is lighter on the litigation aspect, and offers the feature of a

cool-off period. The flexibility of the framework is intended to enable PPIRP to gain much popularity internationally. This framework will be the focal point of our research work.

1.1. Key Characteristics of the Insolvency Bankruptcy Code, 2016

The Insolvency and Bankruptcy Code (IBC), was enacted in 2016 to provide a time-bound process for resolving insolvency and bankruptcy cases in India. The code applies to both individuals and businesses, including small businesses.

Under broad framework of MSME classifications, small businesses are defined as those with a turnover of less than INR 1 crore (approximately USD 120,000) and outstanding debt of less than INR 1 crore. Small businesses that are facing financial distress can initiate a resolution process under the IBC by filing for insolvency. This process is intended to help small businesses restructure their debt and continue operations, rather than liquidating their assets.

The IBC provides a framework for small businesses to resolve their debts through a time-bound process, with the goal of maximizing the value of the business for all stakeholders. The process is overseen by an insolvency professional, who is responsible for identifying and evaluating potential resolution plans. Creditors, including banks and other financial institutions, also have a role in the process, as they vote on any resolution plans that are proposed.

One of the important aspects of the IBC, as it applies to small businesses, is that it provides a fast-track resolution process for small businesses, with a time limit of 90 days for completing the process. This is intended to minimize the disruption to the small business and its employees, as well as to its customers and suppliers.

In summary, the Indian Bankruptcy Code applies to small businesses, providing them with a time-bound process to resolve their financial distress, maximizing the value of the business for all stakeholders and minimizing the disruption to the small business.

1.2. A brief description of PPIRP

A pre-packaged insolvency process is a type of bankruptcy procedure in which a company's management, in consultation with its creditors and a licensed insolvency practitioner, agrees on a plan to restructure the business and pay off its debts before filing for formal insolvency. The goal of a pre-pack is to allow the business to continue operating while protecting it from creditors' claims and to provide a more efficient and cost-effective resolution of the company's financial difficulties than a traditional insolvency process. According to IBC web-site, an application for initiating pre-packaged insolvency resolution process may be made in respect of a corporate debtor classified as a micro, small or medium enterprise under sub-section (1) of section 7 of the Micro, Small and Medium Enterprises Development Act, 2006.

In a pre-pack, the company's assets are sold to a pre-arranged buyer, typically a new company set up by the current management or a third-party investor. The proceeds from the sale are used to pay off the company's creditors, and the new company takes over the business operations. As per IBC, the Corporate Debtor remain unchanged with/without same management.

Pre-packs have been used in a variety of industries, and have been particularly popular among small and medium-sized businesses. However, pre-packs have been criticized for allowing the management of a failing company to retain control of the business while leaving creditors with little recovery.

It is worth noting that pre-packs are not available in all countries, and the specific details of the process can vary depending on the laws and regulations of the country where the company is based.

Pre-packaged insolvency resolution plans can be based on existing knowledge:

- **Enhanced Economic Efficiency:** Pre-packaged plans have the potential to reduce the time and costs associated with insolvency proceedings, allowing distressed companies to swiftly restructure and resume operations. This efficiency can contribute to overall economic productivity and help preserve jobs.
- **Stakeholder Involvement:** Pre-packs typically involve negotiations among various stakeholders, such as creditors, shareholders, and management. This collaborative approach can result in a more balanced resolution plan that considers the interests of multiple parties and minimizes disputes.
- **Preserving Business Value:** By facilitating a quicker resolution process, pre-packaged plans may help preserve the underlying value of the distressed company's business. This can lead to a higher likelihood of successful restructuring and the continuation of viable businesses, which in turn helps maintain economic stability.

- **Creditor Recovery:** Efficient resolution through pre-packs may improve the prospects of creditor recovery. Creditors may have a better chance of receiving higher returns compared to traditional **insolvency proceedings, where delays and costs can erode the recovery value.**
- **Potential Concerns:** While pre-packaged insolvency resolution plans have several advantages, there are also potential concerns. These include the risk of abuse, such as management using pre-packs to unduly benefit themselves or exclude certain stakeholders. Maintaining transparency, fairness, and proper regulatory oversight is essential to address these concerns.

It is important to note that the development and implementation of pre-packaged insolvency resolution plans may vary across jurisdictions, and the specific socio-economic impact could be influenced by the legal and regulatory framework of each country.

1.2.1. A successfully completed PPIRP Case – Amrit India Limited

According to National Company Law Tribunal (NCLT) document (nd), Amrit India Limited is described as a non-governmental company limited by shares. Amrit India Limited has an authorized share capital of INR 86, 50,000 and a paid-up share capital of INR 85, 50,000. Amrit India Limited was operating as a trading and consulting firm on the application date.

It is stated that Amrit India Limited was under a default of financial debt to the tune of IN 12, 25,000/- (Rupees Twelve Lakhs Twenty-Five Thousand Only) which was owed to Awadh Sharan Singh ("Unrelated Financial Creditor"). Amrit India Limited has sanctioned a loan facility for an amount of INR 10,00,000 (Rupees Ten Lakhs only on 25.03.2021 for the purpose of Working Capital Requirement payable with an interest of 18% p.a. in 18 monthly installments. Refer **Table 1** below for a comprehensive list of PPIRP cases resolved to date (May 31st 2024)

This Resolution Plan has considered the interests of all stakeholders considering the advantages and allotted 100 percent of PPIRP Cost to be paid within 15 days, secondly to financial creditors 10 percent within 15 days with 90 percent hair-cut and no dues to employees and work-men, who were to be considered for employment under the plan.

Orders passed:

- a. The application of AMRIT INDIA LTD. for the Pre-Packaged Insolvency Resolution Process is deemed accepted under Section 54C of the Code.
- b. According to the provisions of Chapter III-A of the Insolvency Regulations, Mr. Mukesh Kumar Jain, Resolution Professional (RP) is appointed as a Resolution Professional to conduct "PPIRP."

- c. This Adjudicating Authority directed the RP to make a public declaration of "PPIRP" of Amrit India Limited and invited and collated the claim of the creditors.
- d. As previously stated, RP will receive all assistance and cooperation from Amrit India Limited personnel.
- e. The Resolution Professional (RP) can approach this Adjudicating Authority in the event of non-cooperation. Subject to any action taken in accordance with Section 54J of the Code, if any, the Board of Directors of Amrit India Limited will continue to have authority over Amrit India Limited's management. The Top managerial staff will release their obligations as determined in the bankruptcy code.
- f. The Resolution Professional was directed to file an interim report within 30 days to the authority.
- g. After completing the necessary formalities, the Registry was instructed to send a copy of this order to Amrit India Limited, the Financial Creditor, the Resolution Professional, and the relevant Registrar of Companies within seven working days, and to post it on the website as soon as the order was announced. The Registry was further directed to send a copy of the order to the IBBI for their record.
- h. As the primary objective of PPIRP, Aquarius Fincap and Credits Private Limited have successfully secured the rights to control Amrit India Limited, a trading and consultancy company.
- i. On 3rd May, 2023, the Delhi bench of NCLT approved the resolution plan of Aquarius Fincap and Credits, which involves a settlement of Rs 7.2 lakh. As per the resolution plan, Aquarius Fincap and Credits will pay Rs 7.2 lakh out of the total outstanding dues of Rs 38 lakh. The financial creditors will receive Rs 5 lakh against their claim of Rs 12.70 lakh, while other acknowledged creditors will receive Rs 2.2 lakh, considering their claims exceed Rs 25 lakh in total.
- j. The monetary lender will receive an amount of Rs 5 lakh in instalments. Half of this sum will be paid upon approval of the arrangement by the CoC members, serving as a performance guarantee. The remaining half will be disbursed after the arrangement gets approval from the NCLT.
- k. As of March 31, 2022, Aquarius Fincap and Credits possessed a net worth of Rs 545 crore. Furthermore, the resolution applicant's financial resources are more than sufficient to cover the additional business expenses, and the new promoters and associates will infuse funds from internal accruals and other sources.

Table 1: A summary of PPIRP Cases resolved

Name	Industry	Date of Admission	Date of Resolution	Time taken for Resolution
Amrit India (NCLT New Delhi)	Trading and Consultancy	28.11.22	03.05.2023	156 days
GCCL Infrastructure and Projects (NCLT Ahmedabad)	Construction/Real Estate	14.09.21	05.09.2023	721 days
Enn Tee International Limited (NCLT New Delhi)	Manufacture of apparel & supply of yarn	10.10.22	19.10.2023	374 days
Shree Rajasthan Syntex Limited (NCLT Jaipur)	Manufacture of yarn	19.04.23	22.08.2023	125 days
Sudal Industries Limited (NCLT Mumbai)	Manufacture of aluminium extrusions and base alloys	20.04.23	10.08.2023	112 days

Source: Author Research from IBBI data

From the above **Table 1**, it can be inferred that PPIRP is gaining increased adoption, and the resolution days for the recent cases (Shree Rajasthan Syntex Limited and Sudal Industries Limited) are both low (125 days and 112 days respectively) and this shows a healthy, upward trend for the PPIRP resolution. Further, the adoption can be seen in wide range of industries and that is also a good sign for the PPIRP adoption. If the data for GCCL is removed (considering it as an outlier), then the average resolution days for PPIRP comes in at 192 days, with a standard deviation of 123 days. With more cases being resolved in future, it is possible to develop confidence intervals and predictive algorithms for the resolution time of the case.

1.2.2. The Case of GCCL Infrastructure and Projects Limited

GCCL Infrastructure and Projects Limited became the first corporate debtor to initiate the Pre-Packaged Insolvency Resolution Process (PPIRP) under Section 54A of the Insolvency and Bankruptcy Code (IBC), 2016. The key points of the case are as follows:

- Corporate Debtor: Micro, Small & Medium Enterprise (MSME) involved in turnkey constructions for commercial and residential real estate development, based in Ahmedabad, India, and incorporated in 1994.
- Debt: Owed Rs 54.16 lakh to various creditors, with the default date being December 31, 2020.
- Special Resolution: Passed by the members to initiate PPIRP under Section 54A(2)(g) and approved by the financial creditor as per Section 54A (3).
- Resolution Professional: Parag Sheth was appointed as the resolution professional.

- NCLT Admission: The Ahmedabad bench of the National Company Law Tribunal (NCLT) admitted the application, confirming GCCL met all conditions for initiating PPIRP.
- Cooperation and Management: Under Section 54F(5), the personnel of GCCL had to cooperate with the Resolution Professional (RP). The management remains with the Board of Directors but must comply with duties under Sections 54H(b) and 54H(c), and action can be taken under Section 54J if necessary.

1.2.3. The Case of Sree Rajasthan Syntex Limited

Sree Rajasthan Syntex Limited underwent the Pre-Packaged Insolvency Resolution Process (PPIRP) under the Insolvency and Bankruptcy Code (IBC), 2016. The key points of the case are as follows:

- Outstanding Amount: Rs. 40.55 Crore
- Corporate Debtor: Engaged in the manufacture of chemicals and chemical products.
- Initiation Date: The PPIRP was initiated on April 19, 2023.
- Resolution Professional: Mr. Lekhraj Bajaj was appointed as the resolution professional.
- Resolution Plan Approval: The National Company Law Tribunal (NCLT) Jaipur Bench approved the resolution plan on August 22, 2023.
- Sector: The Company operates in the chemical manufacturing sector.
- Extension: The NCLT extended the PPIRP time limit by three weeks beyond the initial 90 days due to the complexity of the case.

1.2.4. The Case of Sudal Industries Limited

Sudal Industries Limited underwent the Pre-Packaged Insolvency Resolution Process (PPIRP) under the Insolvency and Bankruptcy Code (IBC), 2016. Here are the key points:

- Outstanding Amount: 103.44 Crore, Rs 1,50,73,73,186 by financial creditors and Rs 5,73,44,945 by operational creditors.
- Corporate Debtor: Engaged in the manufacture of Aluminum Extrusions and Aluminum Base Alloys.
- Initiation Date: The PPIRP was initiated on April 20, 2023.
- Resolution Professional: Mr. Prashant Jain was appointed as the resolution professional.
- Resolution Plan Approval: The National Company Law Tribunal (NCLT) Mumbai Bench approved the resolution plan on August 10, 2023.
- Sector: The Company operates in the manufacturing sector.

No data available for En Tee Industries Limited in the IBBI website

1.2.5. Socio-economic impact of PPIRP

Insolvency and bankruptcy have long been associated with social stigma. This negative perception can be traced back to historical practices of harsh treatment towards bankrupts and the belief that bankruptcy signifies a breach in the sacred relationship between debtors and creditors. While the stigma surrounding personal insolvencies has received considerable attention in legal research, corporate insolvencies have been largely overlooked.

This study aims to fill this research gap by examining the forms and impact of stigma related to corporate insolvency. By comparing the corporate insolvency laws of the United States and the United Kingdom, the article highlights differences in approaches influenced by historical, cultural, and economic factors concerning business failures. Additionally, the research explores the presence of bankruptcy stigma in the Indian context, with a focus on how specific provisions of the Insolvency and Bankruptcy Code, 2016 may perpetuate the stigma against incumbent management and corporate debtor promoters.

Wadhwa's (2022) report emphasizes the necessity to reduce the stigma associated with corporate insolvency for effective rescue and rehabilitation of distressed companies. Addressing this stigma can foster an environment conducive to entrepreneurship, innovation, and economic growth in the country.

In response to the COVID-19 pandemic, governments worldwide have taken steps to safeguard their economies and small businesses. One significant measure introduced was the prepack, designed to offer an alternative bankruptcy resolution approach specifically for micro, small, and medium companies (MSMEs). This article concentrates on conducting surveys to identify key determinants of MSME insolvency, including complex insolvency processes, credit behaviour, insufficient information on MSME debtors, post-insolvency finance challenges, and a lack of assets to support formal insolvency procedures.

Through multiple regression analysis, the study reveals contrasting support for the complicated insolvency system. Pre COVID-19 insolvency regimes differ from post COVID-19 regimes, leading to negative reinforcement for complex processes. However, credit behaviour receives positive reinforcement as lenders with security interests prefer to pursue their claims outside the insolvency system. Ultimately, pre-packaged solutions emerge as a viable alternative to the current corporate insolvency resolution procedure (CIRP). They are viewed as less time-consuming and more cost-effective than official insolvency proceedings, as highlighted by Vamsi Krishna and Sreenivas (2022).

The Insolvency and Bankruptcy Code (IBC), particularly the Corporate Insolvency Resolution Process (CIRP), has emerged as a highly successful regulation in India for several reasons. This paper aims to explore and present the key factors contributing to the Code's success. The journey began with the formation of the Expert Committee in August 2014, leading to significant advancements in financial crisis legislation, policy, and practice. What was once considered an ordinary debt default under the IBC has now transformed into a major concern for enterprises, giving rise to a "culture of compliance" and the establishment of a "modern corporate insolvency regime."

The distinguishing features of the current regime include a shift from 'debtor-in-possession' to 'creditor-in-possession,' greater clarity on the concept of 'default,' the recognition of financial creditors, and the implementation of a structured framework for swift, efficient, and fair resolution. Institutional pillars play a crucial role in streamlining the CIRP process, ensuring that stressed assets are managed by specialists with expertise in preserving the business as a going concern. Moreover, a unique regulator fosters an ecosystem to further the Code's objectives.

This paper delves into the origins of India's modern corporate insolvency regime, elucidates the functioning of the institutional pillars, and examines key jurisprudential developments. It also identifies several important topics that demand further development or remain on the unfinished agenda. Ultimately, the paper seeks to provide a comprehensive overview of India's modern corporate insolvency process, as described by Singh (2014).

India's rapidly expanding economy is closely tied to the growth of the micro, small, and medium enterprise (MSME) sector. The Government of India recognizes the sector's significance and is actively fostering an entrepreneurial ecosystem to promote start-ups and innovation-led growth. Despite the extensive support provided, MSME closures are common, especially among micro and small enterprises. The reasons behind these closures are not well understood due to the sector's unorganized and entrepreneurial nature. Research indicates that entrepreneurial exits have a substantial impact on future entrepreneurial activities in the country, necessitating a deeper understanding of Indian MSME owners' exit decisions.

Previous research on entrepreneurial exit has focused on conceptualizing the phenomenon, exploring the motives and strategies of exiting entrepreneurs, factors influencing exit intentions, exit planning, timing, and post-exit activities. While empirical studies have investigated the impact of various internal and external factors on firm departures in developed countries, the study of real exit tactics used by small business owners remains limited. A few recent studies have examined how entrepreneurs' objectives and motivations influence their choice of exit strategy, but these studies have been experimental and focused on developed countries.

Given the unique characteristics of the Indian business environment and the lack of research on entrepreneurial exits in this context, this study aims to explore the factors influencing Indian MSE owners' exit intentions. Employing the theory of planned behaviour, the study investigates the influence of personality, business-related, and market environment factors on different exit intentions of Indian MSE owners. The research is based on a questionnaire-based survey conducted on 360 MSE owners operating in Karnataka state industrial parks. The data is analysed using the Statistical Package for the Social Sciences (SPSS) software for both descriptive and multiple regression analysis.

The findings of the study indicate that an entrepreneur's intention to exit is influenced by factors such as human capital, psychological ownership, firm performance, firm location, market competition, and product demand. Entrepreneurs with strong entrepreneurial skills and experience are more likely to re-enter the business, while those with strong psychological ownership tend to pass the firm on to their family. High-performing enterprises tend to exit for the purpose of harvesting their previous investment and exploring new opportunities. Additionally, the strategic position of the enterprise affects the owner's goal to maximize profits through harvest selling, while negative market conditions may lead to distress selling to avoid failure. While this study contributes to the field of entrepreneurial exit research, its findings are valuable for entrepreneurs and policymakers seeking to comprehend the variables that influence entrepreneurial exits in the Indian context, as highlighted by Socrates (2020).

Feibelman (2010) examines a case study in consumer finance and explores the potential role of consumer bankruptcy or insolvency laws in modern-day India. The study assesses whether and how India could benefit from revising its existing consumer insolvency legislation. Part I of the study highlights the rapid expansion of formal consumer financial markets in India in recent years, in tandem with the country's impressive economic growth, averaging over 7% GDP growth annually from 1997 until the onset of the global economic crisis. Even during the global crisis, India fared relatively well compared to other nations and has shown signs of recovery. The country is projected to maintain growth rates of approximately 7% and 8% over the next two years.

Micro, small, and medium-sized enterprises (MSMEs) play a vital role in India's economy, driving employment, output, economic growth, entrepreneurship, and financial inclusion. This sector provides income to around 110 million individuals and contributes 30% to India's GDP. The government aims for the MSME sector to account for 50% of GDP and create 50 million new jobs in the next five years. However, MSMEs are particularly vulnerable to financial shocks due to difficulties in obtaining timely financing, recruiting, and retaining skilled employees, and accessing regional, national, and international markets. The second wave of the COVID-19 pandemic caught the sector unprepared, following recent recovery from the first wave. Despite being regarded as the backbone of the economy,

MSMEs face unique challenges when it comes to accessing the insolvency process. Moreover, they have been hit hardest during the current pandemic, with delayed payments remaining a significant issue for these businesses, as pointed out by Apte and Das (nd).

The Insolvency and Bankruptcy Code, 2016 (referred to as the Code) was enacted to address India's mounting stressed assets swiftly and efficiently. The Code's primary focus is on expedited resolution through a time-bound process. It sets strict deadlines for completing the Corporate Insolvency Resolution Process (CIRP), and failure to resolve within the specified timeframe may result in liquidation. However, judicial interpretations have led to certain exemptions, causing most CIRPs to exceed the Code's time limit. For instance, as of December 2019, an average of 394 days was taken to effectively handle 190 cases, significantly surpassing the Code's prescribed timetable of 330 days. Such delays in resolution can have significant consequences for the ongoing business of the corporate debtor and affect the realization of asset values. In a more recent study by the World Bank Doing business report (2020), while India has increased its ease of doing business from 136th place in 2016 to 63rd in 2020 in the category of resolving insolvency. According to an IBBI newsletter of September 30, 2023, the number of admitted cases from 2016 till June 2021 was 7058 with only 808 showing an approval of resolution, which is a very low number of resolutions. According to the average time for resolution was at 724 days (excluding excluded time by AA), against the stipulated 270 days. A CRISIL report (2021), states that majority or 75% of cases are pending more than 270 days. Therefore, the need of the hour is for a swift and efficient resolution, which pre-packaging can offer as suggested by Laws, IBC by Srivastava (nd).

The implementation of the Insolvency and Bankruptcy Code (IBC) in 2016 led to the emergence of Insolvency Professionals (IPs) as a new class of regulated professionals in the market. This page aims to elucidate the selection process, the typical profile of applicants joining the profession, and an assessment of their assignments and earnings. An examination of the eligibility criteria and selection procedure reveals that they are appropriate for the expected role of professionals under the Code. The overall profile of IPs indicates a dominance of Chartered Accountants, with a majority being men and concentrated in major cities. While professionals are believed to be working for a livelihood, there is a visible gender wage discrepancy. The post also seeks to understand the challenges faced by IPs and offers recommendations, as outlined by Mittapally and Jayaram (2020).

According to Sahoo (2012), traditional statecraft has limitations in effectively managing markets. To tackle challenges in dynamic market economies, governments worldwide have established regulators with the necessary authority, expertise, and resources. This development of governance through regulators has been significant in recent decades. Regulators, created by statutes, function in the public

interest, and provide public benefits. They have duties like the government in terms of consumer protection, development, and regulation, possessing quasi legislative, executive, and judicial powers. However, they are distinct entities and not the government itself. They operate within a prescribed framework, acting as "Governments within Governments," or imperium in imperio, performing governance on behalf of the government.

India has a well-established and comprehensive regulatory structure tailored to its unique market and societal requirements. Regulators operate in three main areas: professions, markets, and utilities. They are present both at the federal and state levels under central legislation. The Insolvency and Bankruptcy Board of India (IBBI), established under the Insolvency and Bankruptcy Code, 2016 (IBC), is a relatively new addition to the regulatory landscape. The IBBI is an innovative experiment without precedent in the Indian regulatory or global bankruptcy arena. The article explores aspects of the IBBI's functions and operations that set it apart as a distinct regulator, drawing comparisons with the well-established Securities and Exchange Board of India (SEBI).

In conclusion, addressing the socio-economic impact of PPIRP underscores the importance of reducing the stigma associated with corporate insolvency to foster entrepreneurship, innovation, and economic growth. The IBC aims to provide swift and effective resolution to India's growing stressed assets. These plans involve negotiating and agreeing on a resolution plan for a financially distressed company before formal insolvency proceedings commence. Despite the intentions during its launch, Pre-packaged insolvency resolution plans however, are not gaining popularity as a more efficient alternative to address corporate insolvency issues, and this research attempts to learn the reasons for the lack of its adoption.

1.3. Strict PPIRP jurisdictions

Strict pre-packaged insolvency process jurisdictions are countries that have implemented stricter rules and regulations regarding pre-packs to ensure that the process is fair and transparent and to mitigate the potential pitfalls of pre-packs such as lack of transparency, creditor dissatisfaction, management bias, lack of oversight, and risk of fraud.

1.3.1. United Kingdom (UK)

The UK has implemented rules that require the insolvency practitioner to provide detailed information about the company's financial situation and the proposed plan to the creditors and to hold a meeting with the creditors to discuss the plan. Additionally, the UK has implemented rules requiring independent oversight of the pre-pack process by regulatory bodies such as the Insolvency Service.

1.3.2. Australia

In Australia, pre-packs are subject to regulations that require the insolvency practitioner to provide detailed information about the company's financial situation and the proposed plan to the creditors, and to hold a meeting with the creditors to discuss the plan. Additionally, pre-packs are subject to oversight by regulatory bodies such as the Australian Securities and Investments Commission (ASIC).

1.3.3. Canada

In Canada, pre-packs are subject to regulations that require the insolvency practitioner to provide detailed information about the company's financial situation and the proposed plan to the creditors, and to hold a meeting with the creditors to discuss the plan. Additionally, pre-packs are subject to oversight by regulatory bodies such as the Office of the Superintendent of Bankruptcy Canada (OSB).

It is worth noting that the specific details of the process can vary depending on the laws and regulations of the country where the company is based and laws and regulations regarding pre-packs are subject to change over time.

1.3.4. A comparative analysis of Pre-pack regimes

Chawla, Kumar, and Patel (2022) delve into the significance of effective bankruptcy and insolvency regulation in driving business dynamics and economic prosperity, particularly in Brazil, Russia, India, China, and South Africa (BRICS) nations. Their study analyzes the factors influencing the efficacy of resolving insolvency issues, impacting the Ease of Doing Business (EoDB) ranking in the context of BRICS nations, with a specific focus on India. The research reveals that bankruptcy resolution plays a crucial role in India's EoDB rating, while it is vital for Brazil, Russia, and China, and of lesser importance for South Africa.

Handa (2020) explores the potential of the Corporate Insolvency Resolution Process (CIRP) as a route for acquisitions in India. The study highlights the advantages of the CIRP route, such as faster acquisitions, lower voting thresholds, reduced judicial intervention, exemptions, immunity from liability for offenses, and protection from material adverse changes through provisions of the Insolvency and Bankruptcy Code (IBC). However, the paper identifies the need to address lacunae in the CIRP to attract investors from India and abroad, emphasizing clarity on ownership and status of assets and avoiding discriminatory treatment by government regulators. Suggestions include introducing a non-discriminatory provision in the IBC and relying on international jurisprudence to clarify asset status and sale mechanisms through CIRP.

Bliss and Kaufmann (2006) compare bank and non-bank insolvency proceedings in the United States, highlighting fundamental differences between the two regimes. The study emphasizes the need for further empirical evidence on the effectiveness of resolving bank insolvencies since the adoption of specific laws and regulations. The paper concludes that a conclusive verdict on the superiority of one regime over the other awaits further observations.

Boughanmi and Nigam (2017) discuss the need for efficient frameworks for reviving viable existing businesses and preserving jobs. The paper emphasizes that a successful insolvency framework requires comprehensive laws, effective implementation, specialized bankruptcy courts, accelerated proceedings, regulated practitioners, creditor rights, debtor breathing space, viability assessments, technology integration, accessibility, support for viable businesses, and resource allocation. Policymakers should prioritize both promoting new businesses and creating efficient frameworks to revive existing ones.

Kattadayil and Mehboob (2020) compare insolvency and bankruptcy laws in India with those of other countries. The study highlights the progressive nature of the Indian Insolvency and Bankruptcy law, with a focus on the resolution process. Recommendations include adopting the UK's Insolvency Code of Ethics, implementing penalty provisions for conflicts of interest, and ensuring stringent measures to build investor confidence in the Corporate Insolvency Resolution Process (CIRP).

In summary, these research papers provide valuable insights into bankruptcy and insolvency resolution processes across different countries, with a specific focus on BRICS nations, India, the United States, and the United Kingdom. Effective bankruptcy regulation is recognized as crucial for driving business dynamics and economic prosperity. To enhance investor confidence, attract investments, and improve EoDB rankings, it is essential for countries to consider and implement appropriate reforms in their insolvency systems. The studies emphasize the significant impact of bankruptcy resolution on the Ease of Doing Business (EoDB) ranking, particularly in India, Brazil, Russia, China, and to a lesser extent, South Africa. To attract investors and facilitate acquisitions, it is crucial to address gaps in the Corporate Insolvency Resolution Process (CIRP) in India, including asset ownership clarity, avoidance of discriminatory treatment, and incorporation of international best practices. Comparisons between bank and non-bank insolvency proceedings in the United States reveal differences in effectiveness, necessitating further research for conclusive findings. Recommendations for successful insolvency frameworks encompass comprehensive laws, specialized courts, expedited proceedings, regulated practitioners, creditor rights, debtor breathing space, viability assessments, technological integration, accessibility, support for viable businesses, and resource allocation. Policymakers should prioritize both fostering new businesses and creating efficient frameworks to revive existing ones. India's insolvency laws prioritize resolution processes and differ from the US's "Debtor in Possession" approach, suggesting the adoption of the UK's Insolvency Code of Ethics, penalties for conflicts of interest, and measures to enhance investor confidence in the CIRP. By considering these insights and implementing appropriate reforms, countries can strengthen their bankruptcy and insolvency systems, attract investments, improve EoDB rankings, and promote sustainable economic growth. **Table 2** below summarizes the best practices worldwide in Insolvency resolution.

Table 2: Comparison of best practices worldwide in insolvency resolution

s. no	Basis of Comparison	India	United Kingdom	United States of America
1	Law	Insolvency and Bankruptcy Code 2016	UK Insolvency Act 1986	Chapter 11 of US Bankruptcy code
2	Who can start the proceedings	<ul style="list-style-type: none"> • Financial creditors • Operational creditors • Corporate debtor 	<ul style="list-style-type: none"> • Debtor company • Creditors • Holders if qualifying floating chargers 	<ul style="list-style-type: none"> • Debtor company
3	Management control	<ul style="list-style-type: none"> • IP appointed by adjudicating authority • BOD is suspended after appointment of IP 	Administered by insolvency practitioner/administered but everyday operations remain with directors	Debtor in possession (DIP) approach with existing management control
4	Time period for insolvency process	180 days	12 months, with creditors consent can be extended up to 6 more months	Period of 120 days extendable up to 18 months
5	Resolution plan	<ul style="list-style-type: none"> • A resolution plan should be filed in accordance with the provision of the Code • Section 31 states that AA must also adopt the COC approved resolution plan 	8 weeks of administrator appointment or extended period as court may allow	Debtor has 4 months to propose & obtain approval from shareholders & impaired creditors with a two-week timeframe
6	Approval of plan	Section 30(4) mandates that the proposal receive 66% of the "Committee of Creditors" (COC) voting share	Approval by majority in value of creditors voting	Approval by majority creditors and 2/3 rd in actual voting
7	Sale of assets during insolvency	IP has the authority to sell the assets after the approval of COC	<ul style="list-style-type: none"> • Administrator has the capacity to enter the contracts without bearing personal liability • They have the authority to sell any debtor property 	Debtor is allowed to sell a substantial portion of its unrestrained assets under section 363 of the bankruptcy code

			without the court's approval	
8	Insolvency proceedings cost	The cost is borne by debtor and lender may finance the debtor in exchange for additional lien over assets which are not pledged to others lenders	The cost is borne by debtor	Borne by debtor & lender may finance the debtor in exchange for additional lien over assets which are not pledged to others lenders
9	Priorities of the payments (Top to bottom)	<ul style="list-style-type: none"> • Insolvency cost • Employees due preceding 12 months • Secured creditors • Unsecured creditors • State dues • Remaining debts and dues • Preference shareholders • Equity shareholders 	<ul style="list-style-type: none"> • Secured creditors • Expenses of insolvent estates • Employee's salary 4 months prior to insolvency • Floating charge creditor • Unsecured creditors • Equity holders 	<ul style="list-style-type: none"> • Secured creditors • Insolvency proceeding cost • Claims raised during gap period • Employees' wages & benefits • Deposit claims • Government tax claims • Unsecured claims • Equity interest
10	Approval of plan	Approval from majority of creditors is required	By majority creditors	By majority creditors
11	Sale of assets during insolvency	Debtor is not allowed to sell	Insolvency administrator or debtor	Judicial manager has the authority to sell the assets and distribute the net proceedings to the creditors

In a study conducted by the University of Wolverhampton (2014), in the UK, out of the 121 buyers who encountered difficulties within 36 months of the pre-pack deal, it was evident that roughly a third of them opted for rescue measures like a Company Voluntary Arrangement (CVA) or, more commonly, administration. The remaining two-thirds found themselves in situations where their businesses were no longer sustainable. This implies that although it seems that 25.5% of pre-packs experienced setbacks, only 17% reached a point where the business could not continue.

In a study by Walters and Frisby (2011), in the UK, CVAs were used primarily in small firms and that stand-alone CVAs had a high level of success rate in winding up rather than in restructuring.

1.4. An alternative to PPIRP – Creditor Led Settlement and One time settlement (OTS)

To assay the alternatives available in lieu of PPIRP, Creditor led systems were investigated, so that our research covers allied areas in understanding the lack of adoption of PPIRP. If the debtors have the money, the settlement can be carried out with the bankers upfront, which may lead to ineffective usage of PPIRP. The creditor-led settlement system in Pre-Packaged Insolvency Resolution Process (PPIRP) involves negotiations and agreements between the debtor and its creditors regarding the repayment of debts during the insolvency resolution. It allows creditors to actively participate in the decision-making process and reach a consensus on the terms of the resolution plan. Creditors, based on their respective claims, can vote on the proposed plan, ensuring their interests are considered. This system promotes transparency, fairness, and collaboration among stakeholders, ultimately leading to an effective resolution of the debtor's insolvency and debt restructuring. In Context, PPIRP stands for pre-packed insolvency resolution process in this Creditor led settlement system refers to settlement or agreement regarding repayment of debts. This plan includes details on how the debts of corporate debtors will be restructured or repaid. This plan is presented for the approval of creditors. This Creditor-led settlement system involves negotiating and discussing between the debtors and their creditors to reach a consensus on the terms of the resolution plan. Once the settlement is reached, that plan is submitted to the National Company Law Tribunal (NCLT) for approval, granting of approval includes the interest of majority Stakeholders and creditors. The settlement system aims to ensure fair treatment of creditors and their interests. The resolution plan should consider the order of priority in which different types of creditors will be repaid and consider their respective rights and claims. This point is very important regarding the feasibility of the settlement system in the context of PPIRP. If the debtor has already money or sufficient funds with bankers upfront, it may indeed render the PPIRP process unnecessary or ineffective. The primary objective of PPIRP is to provide the framework for the resolution of insolvent companies by restructuring their debts. Aims to balance the interests of all

stakeholders and increase the value of debtors' assets. In cases where the debtor has the financial means to settle the debts without undergoing the PPIRP process, it may be more efficient and straightforward to process to proceed with a direct settlement with a banker. This helps to avoid the cost, complexities, and potential delays associated with implementing the PPIRP process. It is important to note that the decision to utilize PPIRP or pursue a direct settlement depends on various factors, including the specific circumstances of the debtor, the nature and extent of the debts, the viability of the business, and the applicable legal framework. Each case should be evaluated on its own merits, considering the best interests of all stakeholders involved.

Several interviews were conducted at leading banks in the Bengaluru Urban district. In the first interview conducted at the Bank of Baroda on 15th July 2023, in the M.S. Ramaiah Institute of Technology Branch, the manager stated that one of the reasons small loans are not following the PPIRP route is that the Government gives a security of Rs. 2 crores, and this gives less incentive for banks to pursue any formal insolvency proceedings. In a second interview conducted on 15th July 2023 at HDFC Bank on 80ft Road, Sanjay Nagar, Bangalore, the manager stated that centralized banks did not consider creditor led settlement systems. However, this was not convincing, and more bankers were interviewed, including Canara Bank manager at 80ft Road, Sanjay Nagar, Bangalore on 15th July 2023. The Manager stated that first, if any Borrower was not able to pay the loan some steps are considered, including filing a law-suit, newspaper publication to sell assets, and one time settlement. (OTS). OTS is a process by which when a borrower was not able to repay the loan on time, bank will reduce the principal amount and interest amount. The OTS amount is considered as per these factors on considering based on the age of the (Non-Performing Assets) and divided into 3 installments. e.g.: If any borrower died then the amount will be reduced more and made Interest-free. In the event of machinery asset value recovery, Bank provides the amount less than the value of the machinery. Machinery is sold and then bank recovers the loan amount. Bank will go to auctions, newspapers, online own official websites. Bank will try to obtain the par value of the machinery. Bank will get the latest valuation of machinery and then try to recover. The banker also mentioned Asset Retirement Obligation (ARO) as an accounting concept that pertains to the estimated costs a company may incur for the retirement or disposal of a long-lived asset. Long-lived assets include items like machinery, equipment, buildings, or any asset that has a significant life span. Companies are required to estimate and account for the future costs of retiring or removing these assets from service, especially if the retirement is associated with environmental remediation or other restoration obligations. Finally, IDBI bank manager was interviewed on 15th July 2023 and they mentioned difficulty in implementation of creditor led system, as it is difficult and protracted process, and in cases of smaller MSME, it will be difficult to implement creditor led systems. Further, the banker stated there were alternatives to PPIRP

which included CIRP and OTS type resolution mechanisms. According to a report by business India (2022), as per input received from the 11 nationalized banks, OTS was approved in 38,23,432 cases during the last three financial years. Further, the aggregate amount of Rs 60,940 crore has been recovered through OTS by these nationalized banks during the last three financial years and up to December 2021.

To further probe OTS, more interviews were conducted with Bank managers and Chartered Accountants, in the 2nd Week of October 2023. From the interviews, the consensus number for the OTS settlements has a mean value of occurrence of approximately 25% (meaning, approximately one-fourth of Insolvencies are treated under the OTS route). On average, approximately 30% of OTS settlements are successful, therefore we can infer that the aggregate success rate is approximately $25\% \times 30\% = 7.5\%$ on average, making it at best a very modest method of successful settlement.

1.5. PPIRP Pitfalls

Pre-packaged insolvency processes, also known as pre-packs, can have several potential pitfalls. Some of these include:

1.5.1. Lack of Transparency

Pre-packs are designed for Transparency, however there may be a general perception that there is a lack of involvement of the Insolvent Company Creditors or the public. Specifically, Section (3) and (4) below from the IBC, 2016 clearly show the steps taken to mitigate Lack of Transparency. One may refer applicable sec 54A of IBC for details on this topic

(3) The corporate debtor shall obtain an approval from its financial creditors, not being its related parties, representing not less than sixty-six per cent. in value of the financial debt due to such creditors, for the filing of an application for initiating pre-packaged insolvency resolution process, in such form as may be specified:

Provided that where a corporate debtor does not have any financial creditors, not being its related parties, the approval under this sub-section shall be provided by such persons as may be specified.

(4) Prior to seeking approval from financial creditors under sub-section (3), the corporate debtor shall provide such financial creditors with —

(a) The declaration referred to in clause (f) of sub- section (2);

(b) The special resolution or resolution referred to in clause (g) of subsection (2);

(c) A base resolution plan which conforms to the requirements referred to in section 54K, and such other conditions as may be specified;

Perceived Lack of transparency in the pre-packaged insolvency resolution process can be a pitfall as it can lead to a lack of confidence among the stakeholders, creditors, and employees. It can also lead to suspicions of insider dealing and make it difficult for creditors to assess the fairness of the proposed plan.

This perceived lack of transparency can be problematic as it can make it difficult for creditors to understand the financial situation of the company and to assess the fairness of the proposed plan. It can also make it difficult for regulators and other stakeholders to ensure that the process is fair and transparent. To mitigate this pitfall, some jurisdictions have implemented stricter rules and regulations regarding pre-packs. For example, in UK, Legal Framework is strong, the insolvency practitioner is required be licensed and needs to provide detailed information about the company's financial situation and the proposed plan to the creditors, and to hold a meeting with the creditors to discuss the plan. **Transparency is tantamount in the resolution process in the UK. Directors can also be made liable for personal assets in case impropriety is found in their actions.**

In summary, lack of transparency in the pre-packaged insolvency resolution process can undermine the credibility of the process and make it difficult for stakeholders to understand the financial situation of the company and the fairness of the proposed plan. This can be mitigated through the implementation of stricter rules and regulations, and independent oversight of the process.

1.5.2. Creditor Dis-satisfaction

Creditor dissatisfaction is one of the potential pitfalls of pre-packaged insolvency processes. They may be unhappy with the outcome of a pre-pack, as they may receive less than they would have in a traditional insolvency process. This can lead to legal challenges and delays in the implementation of the plan.

In a pre-pack, the assets of the company are sold to a pre-arranged buyer, typically a new company set up by the current management or a third-party investor. The proceeds from the sale are used to pay off the company's creditors, but the amount that creditors receive may be less than what they are owed. This can be particularly problematic for secured creditors, who may have a legal claim on

specific assets of the company, but may not receive full value for those assets in a pre-pack. The Corporate Debtor remain unchanged with/without same management

In a very recent article in Livemint (2023), the author states that PPIRP has failed to take off because of voluntary haircuts and creditors are becoming increasingly wary of potential accusation of impropriety in the future.

Creditor dissatisfaction can also arise when the pre-pack plan is perceived as unfair or one-sided. For example, if the management of the company can retain control of the business and continue operating while leaving creditors with little recovery, it can be seen as unfair and can lead to legal challenges and delays in the implementation of the plan.

In summary, Creditor dissatisfaction is a major pitfall of the pre-packaged insolvency process as they may receive less than they would have in a traditional insolvency process. This can lead to legal challenges and delays in the implementation of the plan. It can be mitigated by implementing stricter rules, regulations, and independent oversight of the process to ensure that the process is fair and transparent.

1.5.3. Management Bias

Pre-packs can be seen as a way for the current management of a failing company to retain control of the business, rather than allowing for a fresh start under new management. This can be seen as unfair and can lead to questions about the integrity of the process.

Management bias is a potential pitfall of pre-packaged insolvency processes. It can occur when the current management of a failing company is able to retain control of the business and continue operating while leaving creditors with little recovery. This can be seen as unfair and can lead to questions about the integrity of the process.

In a pre-pack, the assets of the company are sold to a pre-arranged buyer, typically a new company set up by the current management or a third-party investor. The proceeds from the sale are used to pay off the company's creditors, but the management of the old company may retain control of the new company. This can be problematic as it can be seen as allowing the management to avoid accountability for the financial difficulties of the old company, and to continue operating without addressing the underlying issues that led to the insolvency.

Management bias can also occur when the pre-pack plan is perceived as benefiting the management to the detriment of the creditors. For example, if the management can retain control

of the business and continue operating while leaving creditors with little recovery, it can be seen as unfair and can lead to legal challenges and delays in the implementation of the plan.

To mitigate this pitfall, some jurisdictions have implemented stricter rules and regulations regarding pre-packs. For example, in UK, Legal Framework is strong, the insolvency practitioner is required be licensed and needs to provide detailed information about the company's financial situation and the proposed plan to the creditors, and to hold a meeting with the creditors to discuss the plan.

In summary, management bias is a potential pitfall of the pre-packaged insolvency process as it can be seen as allowing the management to retain control of the business and avoid accountability for the financial difficulties of the old company while leaving creditors with little recovery. It can be mitigated by implementing stricter rules, regulations, and independent oversight of the process to ensure that the process is fair and transparent.

1.5.4. Lack of Oversight

Pre-packs are typically carried out by a licensed insolvency practitioner, but the process may not be subject to the same level of oversight and regulation as a traditional insolvency process. This can make it difficult for regulators and other stakeholders to ensure that the process is fair and transparent.

Lack of oversight is a potential pitfall of pre-packaged insolvency processes. It can occur when the process is not subject to the same level of oversight and regulation as a traditional insolvency process. This can make it difficult for regulators and other stakeholders to ensure that the process is fair and transparent.

In a pre-pack, the assets of the company are sold to a pre-arranged buyer, typically a new company set up by the current management or a third-party investor. The proceeds from the sale are used to pay off the company's creditors, but the process may not be subject to the same level of oversight and regulation as a traditional insolvency process. This can make it difficult for regulators and other stakeholders to ensure that the process is fair and transparent. The Corporate Debtor remain unchanged with/without same management

Lack of oversight can also make it difficult for regulators and other stakeholders to detect and prevent fraud. This can lead to losses for creditors and other stakeholders and can damage the reputation of the company and the insolvency profession.

To mitigate this pitfall, some jurisdictions have implemented stricter rules and regulations regarding pre-packs. For example, in UK, Legal Framework is strong, the insolvency practitioner is required be licensed and needs to provide detailed information about the company's financial situation and the proposed plan to the creditors, and to hold a meeting with the creditors to discuss the plan.

In summary, lack of oversight is a potential pitfall of the pre-packaged insolvency process as it can make it difficult for regulators and other stakeholders to ensure that the process is fair and transparent. It can also make it difficult to detect and prevent fraud. It can be mitigated by implementing stricter rules, regulations, and independent oversight of the process.

1.5.5. Risk of Fraud

The lack of transparency in pre-packs can make it difficult to detect and prevent fraud. This can lead to losses for creditors and other stakeholders and can damage the reputation of the company and the insolvency profession.

It is worth noting that laws and regulations regarding pre-packs vary by country, and some jurisdictions have stricter rules in place to mitigate these potential pitfalls.

Fraud can occur in pre-packs in a variety of ways. For example, the management of a failing company may manipulate the financial records to make it appear as though the company is more financially stable than it is. This can make it more difficult for creditors to understand the company's true financial situation and can make it more likely that they will agree to a pre-pack plan that is not in their best interests.

Another potential form of fraud is insider trading, where the management of a failing company uses its inside knowledge of the company's financial situation to profit at the expense of the creditors. This can be seen as unfair and can lead to legal challenges and delays in the implementation of the plan.

To mitigate this pitfall, somewhat similar to sec 54 J of IBC, some jurisdictions have implemented stricter rules and regulations regarding pre-packs. For example, in UK, Legal Framework is strong, the insolvency practitioner is required to be licensed and needs to provide detailed information about the company's financial situation and the proposed plan to the creditors, and to hold a meeting with the creditors to discuss the plan. Transparency is tantamount in the resolution process in the UK. Directors can also be made liable for personal assets in case impropriety is found in their actions.

In summary, the risk of fraud is a potential pitfall of the pre-packaged insolvency process as the lack of transparency in pre-packs can make it difficult to detect and prevent fraud, which can lead to losses for creditors and other stakeholders and can damage the reputation of the company and the insolvency profession. It can be mitigated by implementing stricter rules, regulations, and independent oversight of the process.

2. Research Objective and Problem Identification

The main objective of this research is to identify and analyse the *'Reasons and Remedies for Under-utilization of the Pre-Packaged Insolvency Resolution Process in India (hereon PPIRP framework)'* with the use of the field survey method of Research, by questioning individuals on the topic(s) and analysing their response, Jackson (2011).

2.1. Literature Review leading to Problem Identification

In a recent survey of (161) Russian Insurance Companies by Grishunin, Bukreeva and Astakhova (2022) reveals that among financial factors, profitability, liquidity, and premium collection discipline determines the level of credit risks in these firms. Further, among factors which were not related to financial matters, channel strategy, strategic management quality and the level of quality of credit of the reinsurers play a role in explaining the credit score of the Insurance companies. In a study involving the hospitality sector in Portugal, Correia et al.(2022) discuss models to predict insolvency in the hospitality sector of local accommodation companies and find lower levels of insolvency in firms with higher levels of profitability and higher levels of insolvency in firms with higher level of current assets. In a study related to the sports sector, thirty-five Brazilian football clubs were chosen and their financial statements from 2011 till 2018 were analysed to predict the insolvency. The study uses neural networks and discovers that current asset turnover ratios played a role in the forecast of the insolvency. Further, sports performance was also a determinant in estimating the insolvency probability of such sporting firms, the authors conclude. In a study involving Insolvency in the entrepreneurship domain, Modina and Zedda (2022) studied business ventures across industry sectors with an objective to discern commonality of factors affecting the possible Insolvency of such firms across the selected sectors. The study uses Cluster Analysis and determines that there are certain key syndromes which are common across these sectors in explaining Insolvency, while also determining that risk could be induced in various ways with other factors not related to the common factors discovered. In a study related to Insolvency in the Indian Construction Sector, Patel et al.

(2022) find that contractors can become insolvent due to various factors, and these include issues related to lack of operational cash flow, not bidding at an adequate level, possibly to secure the project then being unable to deliver, inadequate ability to run the business, improper control on financial matters, excessive amount of short-term borrowing to finance projects. The authors analysed the situation through a relative importance index as well as category-wise method, with the help of Spearman's rank correlation metric. Maria and Singh (2021) analyse Corporate Governance level of the firm in the context that firm board members continue to retain profit motive even when the firm approaches Insolvency or in their terminology, distress. The authors discuss group structures, shareholder responsibilities, and payment of dividend and duties of Directors as issues confronting the Corporation. The authors advocate measures to streamline and improve Corporate Governance and Insolvency proceedings, to boost investor confidence. In a study using varied statistical techniques, Arora, and Saurabh (2021) use Machine Learning Techniques such as Logistic Regression, Lasso Regression and Decision Tree to predict Insolvency. The finding is consistent with existing literature that Market Capitalization to Debt Ratio is the most significant variable in Insolvency Prediction. The authors state that firms suffering from low market capitalization have inadequate means to raise further funds and this pushes them into the brink of distress further. The authors also observe higher level of debt for firms in distress. Rout and Shankar (2022) are among the earliest researchers to investigate the reasons for PPIRP being a non-starter and this research is detailed further in this proposal in the Research Gap section.

2.2. Research Questions

There is a scarcity of literature in PPIRP, according to Rout and Shankar (2022). The existing literature does not contain reference to the reasons and remedies for the under-utilization of the PPIRP framework. Hence, this topic is interrogated in detail for the proposed research. **Figure 1**, sourced from the IBBI web-site, depicts the typical PPIRP process. However, structured the below process may be, there is documented lack of adoption, the causality of which is the main concern of the ongoing research.

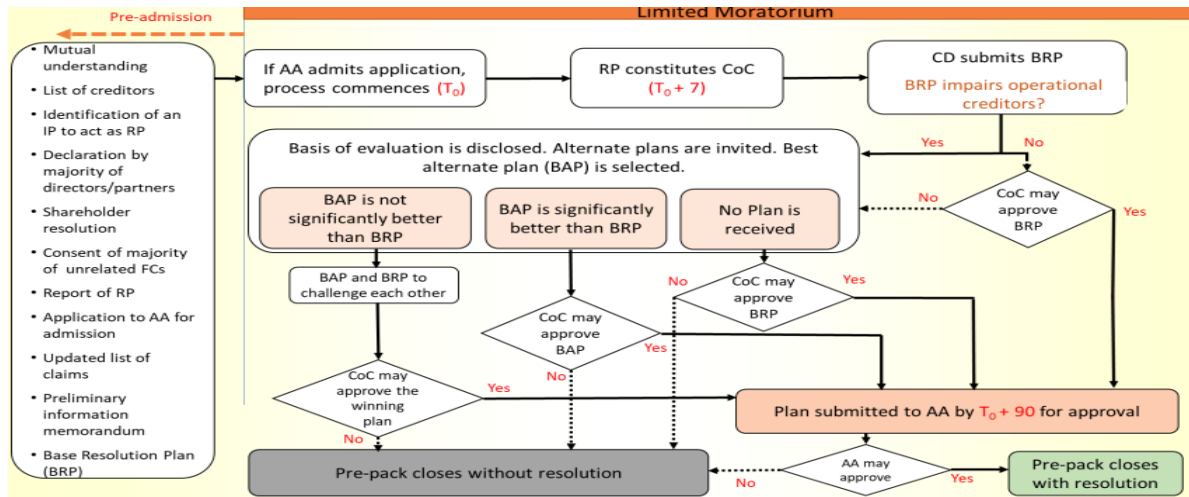


Figure 1: Typical PPIRP Process

Source: IBBI Website

2.3. Problem Statement

Whenever an Individual and/or Organizations are in the verge of reaching Insolvency, there is a tendency to liquidate the assets. The liquidation of assets involves a lot of legal procedures and expenses for invoking the same. If the assets are in International Market, the procedure becomes complex. Therefore, an arbitration approach at this stage can facilitate both the Parties. The proposed research aims at systematically analysing the causes of under-utilization of the PPIRP framework and the possible remedies so that its utilization is increased. The title of the research is therefore:

“Reasons and Remedies for Under-Utilization of Pre-Packaged Insolvency Resolution Process (PPIRP Framework) “

2.4. Research Gap

Rao (2019) analysed pre-pack insolvency process in foreign jurisdictions and explained how similar processes could be beneficial to the Insolvency Bankruptcy Code (IBC). Mohan and Raj (2020) analysed that successful pre-pack regimes in foreign jurisdictions have helped in preserving employment and in value maximization in those countries. Mandloi (2021) analysed pre-pack implementations in Singapore, France, UK, and USA and recommended the best practices for adoption in the Indian context. Apte and Das (2021) extended the application of PPIRP beyond corporate MSMEs in India. None of the above authors addressed the aspect of awareness or issues related to pre-pack regimes in foreign jurisdictions and how these issues may manifest in the

Indian context. Only Rout and Shankar (2022) have addressed the awareness aspect of the PPIRP after a survey of 58 respondents was measured as lower than 65%. Further, the study shows that i) insufficiency of marketing of pre-pack sales, ii) lack of transparency in the pre-pack process, iii) post insolvency financing availability for MSME, iv) fear of hair-cut and accountability, slowness in decision making of the Committee of Creditors (CoC), v) fear of losing control of the MSME, vi) lack of consideration of the future viability of the new company and vii) availability of substitute schemes in the wake of Covid-19 are the possible reasons for under-utilization of PPIRP framework. However, the authors do not delve into the root cause analysis and our research will attempt to fill these gaps.

2.5. Research Hypothesis

The proposed research will perform extensive hypothesis testing to isolate root causes into the Under-utilization of the PPIRP Framework. Keeping the problem at the head of the fish in the below Ishikawa fish bone diagram, also called a Root Cause Analysis diagram (RCA) in **Figure 2**, by Ishikawa (1985), and working backwards such that the bones which are the sub-causes, the reasons for Under-utilization, thus, can be isolated. Further, the hypothesis will be formed on the premise that the specific factor is not a cause, unless otherwise proven.

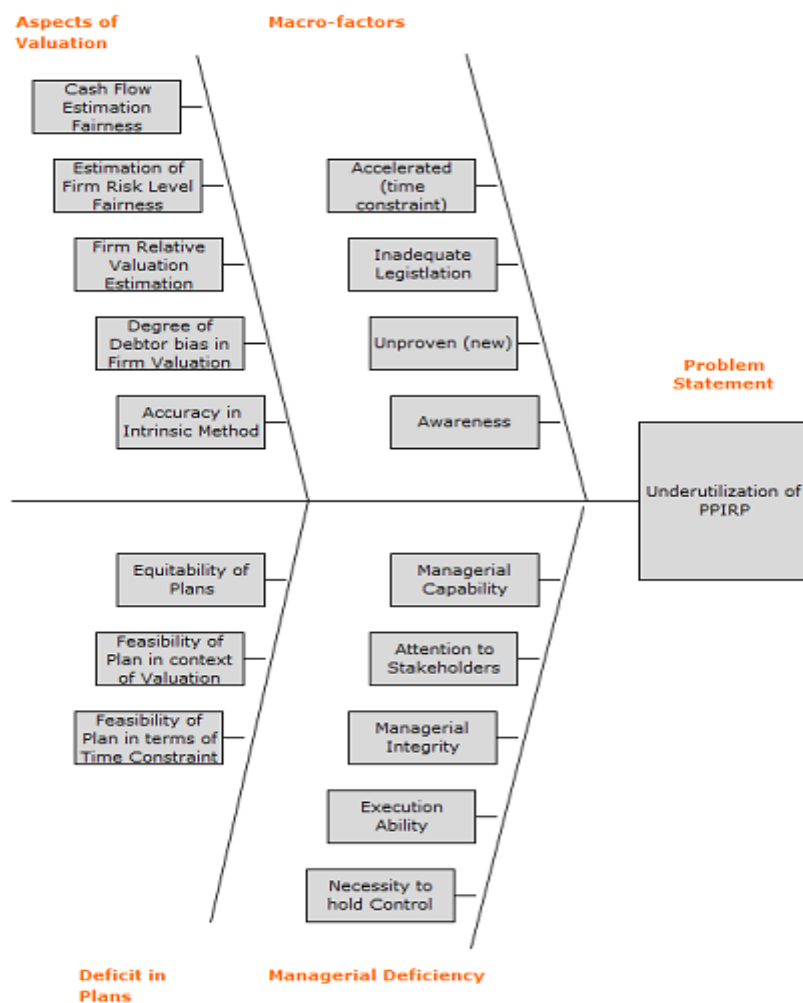


Figure 2: Root Cause Analysis Diagram for PPIRP Under-utilization Analysis

2.6. Research Methodology

The proposed research methodology first defines the scope of the research in terms of type of respondent and geographical scope. The variables used for the analysis (questions asked of the respondents) are identified and are primarily driven off the RCA diagram in **Figure 2** above. Based on the variables identified, the questionnaire is developed and the responses are recorded.

2.6.1. Scope of Research

The Geographic scope of the Research includes the Bengaluru Metropolitan area in India and it represents uniformly, Finance professionals, Bankers, Chartered Accountants, Micro, Small and Medium Enterprises (MSME) Owners and Insolvency Professionals. Bengaluru has a vibrant MSME ecosystem, spearheaded by organizations like the Peenya Industrial Association, Bangalore Machine Tools Manufacturing Network (BMTMN) among several others. In addition, Bengaluru has several Insolvency Professionals as well as lawyers, who operate in Insolvency and are well equipped to answer questions on the topic of under-utilisation of PPIRP. The scope of the variables being selected for the research are listed in **2.6.2** and the reasons for not including other variables are also listed in **2.6.2**

2.6.2. Identification of Variables

The motivation for the variables selected for Research comes from the hypothesis we constructed in the Root Cause Analysis (RCA) in **Figure 2**. The reasons for the under-utilization of PPIRP are envisaged to be grouped under four broad areas, Macro-factors, Valuation related issues, Deficits in Resolution Plans, and Managerial Deficiencies. Further hypotheses are developed for sub-categories of possible reasons for under-utilization of the PPIRP under these broader groupings. These questions then become part of the questionnaire which is detailed in the section **2.6.3**. Variables related to fraud and wilful manipulation of financial records are excluded from explicit and detailed questions because of lack of availability of annual reports of insolvent firms.

2.6.3. Questionnaire Design and Recording of Responses

A questionnaire is developed, the first, to be asked of Bankers (here onwards Creditors) and Chartered accountants (CAs), Leaders MSME owners and Industry Association Leaders (here onwards Debtors). The questionnaire is designed to capture reasons for under-utilization of PPIRP. Care is taken to explain the concepts of the questionnaire to the respondents, as there may be ambiguity in the interpretation of each of the questions. **Appendix** at the end of the report, contains detailed questions of the questionnaire and photographic proof of the field investigators recording responses in the field. The responses are taken online when possible, and where not possible, are taken in printed form and data is entered into the online survey forms. The Bankers, CAs, Insolvency Professionals and MSME owners are selected at random from the databases available to the Researchers. Totally, 50 Bankers and CAs, 50 Insolvency Professionals and Lawyers, 50 MSME Owners and Industry Association responses are kept as a target for analysis. The rationale for the sample size is detailed in section **2.6.4**

2.6.4. Sample Size Calculation

The number of Chartered Accountants in India is approximately 3,30,000. We assume 70 percent of these CAs practice in urban areas. Therefore, the number of urban CAs is 2,31,000. In addition, we assume that urban population in India is 67,50,00,000. The population of Bengaluru is approximately 1,00,00,000 therefore approximately 3,500 CAs practice in Bengaluru urban. If we assume that approximately 10 percent of these CAs involve in Insolvency Practice, with an error rate of 7.5 percent and significance level of 0.05 percent, we arrive at approximately 58 CAs to be surveyed in the cluster of Bankers and CAs. For Insolvency Professionals and Lawyers, we assume a similar methodology to compute the Sample Size. The number of Lawyers in India is approximately 20,00,000. We assume 50 percent of these Lawyers practice in urban areas. Therefore, the number of urban lawyers is 10,00,000. Applying the population ratio for urban Bengaluru to the total urban population of India, there are approximately 20,000 Lawyers in Bangalore. Further, we assume only a small fraction of these lawyers practice Insolvency, so applying a percentage of 0.125 percent, we arrive at 250 Insolvency Professionals and Lawyers in the population. The sample size is estimated using the same error rate and significance levels, so 49 Insolvency Professionals and lawyers ought to be sampled. Finally, assuming there are 250 MSMEs in urban Bengaluru with capitalization of Rs. 100 crore or more, in urban Bengaluru, we arrive at a sample size of 49 MSMEs and Industry Association Leaders to be contacted for the survey.

The sample size is defined as S

$$S = \frac{\frac{Z^2 p(1-p)}{e^2}}{1 + \frac{Z^2 p(1-p)}{Ne^2}}$$

Where **Z = 1.96** for the 5 percent significance level and e = 7.5 percent for the error rate, N is the population size and finally p is the value of the standard deviation, set at 0.50 or 50 percent. The above formulation can be found in, for example in Israel (1992)

2.6.5. Cronbach Alpha Computation for reliability testing

Majority of the questions are developed on the **Likert Scale** of **1-5**. The questions asked are balanced across respondents, so it is meaningful to take averages across the respondents, as researched by Burns and Burns (2008). To test the validity and the reliability of the questions, the Cronbach alpha is selected and tested for its value, so that the questionnaire responses are deemed reliable for use. The higher the Cronbach alpha, it is suggested that the relationships between the questions account for most of the overall variability. The formulation for Cronbach's alpha is:

$$\alpha = \frac{k}{k-1} \left(1 - \frac{\sum_1^k \sigma_y^2}{\sigma_x^2} \right)$$

Where α is the Cronbach's alpha, k is the number of items in the measure, σ_y^2 is the variance associated with each measure and finally σ_x^2 is the variance associated with the total scores. Once the Cronbach's alpha exceeds the value of 0.6 for Early-stage research, according to Nunnally (1967) it may be a reliable score.

A **Cronbach's alpha** is derived for each of the potential causal groups of factors

i) **Macro-factors** including Awareness, Newness of PPIRP, Lack of Legislative Infrastructure and finally the time constraint in PPIRP settlement, as investigated by Rout and Shankar (2022) and to be validated in this research. The computed value for Macro Factor Cronbach alpha is **0.665**, which indicates the data is reliable.

ii) **Creditor perspective** on firm-valuation factors including valuation of fixed assets, accuracy in estimation of cash flows, creditor risk level, relative valuation of firm, level of biasedness to Debtor, accuracy in Intrinsic valuation of firm. Again, Rout and Shankar (2022) discuss the fear of hair-cut, accountability, and transparency as possible issues in the adoption of PPIRP. This aspect

is further being investigated in this research. The computed value for Creditor Perspective Cronbach alpha is **0.75**, which indicates the data is reliable.

iii) **Managerial deficiencies** factors including managerial capability, management attention to stakeholders, integrity of management, managerial execution ability, desire of management to control operations. Rout and Shankar (2022) consider control of firm, future viability, and transparency, all of which are consolidated under managerial deficiencies in this research. The computed value for managerial deficiency Cronbach alpha is **0.69**, which indicates the data is reliable.

iv) **Deficiency in plan** including factors such as plan equitability, valuation constraints and finally time constraints. The computed value for managerial deficiency Cronbach alpha is **0.73**, which indicates the data is reliable.

2.6.6. The role and importance of Structural Equation Modeling (SEM) in Research

1. **Model Testing:** SEM helps researchers test theoretical models by assessing the fit between the observed data and the hypothesized relationships among variables. It allows researchers to evaluate the overall goodness-of-fit of the model, identify areas where the model needs improvement, and refine or validate existing theories. Early uses of SEM were documented by Wright (1921), Wright (1934) . Duncan (1975) introduced the concept of SEM in the domain of social sciences.

2. **Hypothesis Testing:** SEM enables researchers to test specific hypotheses by examining the significance and direction of relationships among variables. It provides statistical tests to evaluate the significance of each path or relationship in the model, allowing researchers to determine if the hypothesized relationships are supported by the data.

3. **Mediation and Moderation Analysis:** SEM facilitates the investigation of mediating and moderating effects in research. Mediation analysis helps determine if a variable acts as a mediator, explaining the relationship between two other variables. Moderation analysis examines if the relationship between two variables changes depending on the value of a third variable. SEM allows for the simultaneous examination of multiple mediation and moderation effects. The use of latent variables was propagated by Hayduk (2000) and Bollen (1989).

4. **Measurement Model Evaluation:** SEM assists researchers in evaluating the validity and reliability of measurement instruments or scales used in data collection. It helps assess the extent to which the observed variables reflect the underlying constructs they are intended to measure, providing insights into

the quality of the measurement model. Instances of Measurement Model evaluation can be found in Hair et al. (2021), Fan et al. (2016) who document 146 uses of SEM in ecological studies.

5. Multivariate Analysis: SEM allows researchers to analyse multiple dependent and independent variables simultaneously, considering their interrelationships. It overcomes the limitations of traditional regression analysis, which often assumes independence among variables. SEM can handle complex models with latent (unobserved) variables, which is particularly useful in social sciences and psychology. SEM is extensively discussed in an open access paper by Hair et al. (2021).

6. Model Comparison: SEM allows for the comparison of different models to determine which model fits the data best. Researchers can compare competing models, alternative specifications, or nested models to select the most appropriate representation of the data. This helps in model refinement and theory development. Aspects of model selection in SEM are extensively discussed in Lin, Huang and Weng (2017).

7. Predictive Modelling: SEM can be used for predictive purposes, estimating relationships, and making predictions about unobserved variables. It enables researchers to assess the impact of changes in one or more variables on the overall model, providing insights for decision-making and policy implications. This aspect of predictive modelling in SEM is extensively discussed in Shmueli et al. (2019).

In summary, SEM plays a crucial role in research analysis by providing a comprehensive framework to test theoretical models, evaluate measurement validity, analyze complex relationships, and make predictions. It enhances researchers' understanding of complex phenomena, facilitates theory development, and contributes to evidence-based decision-making.

Specifically, for this research, a path diagram for a Structural equation model (SEM) is displayed in **Figure 3** below:

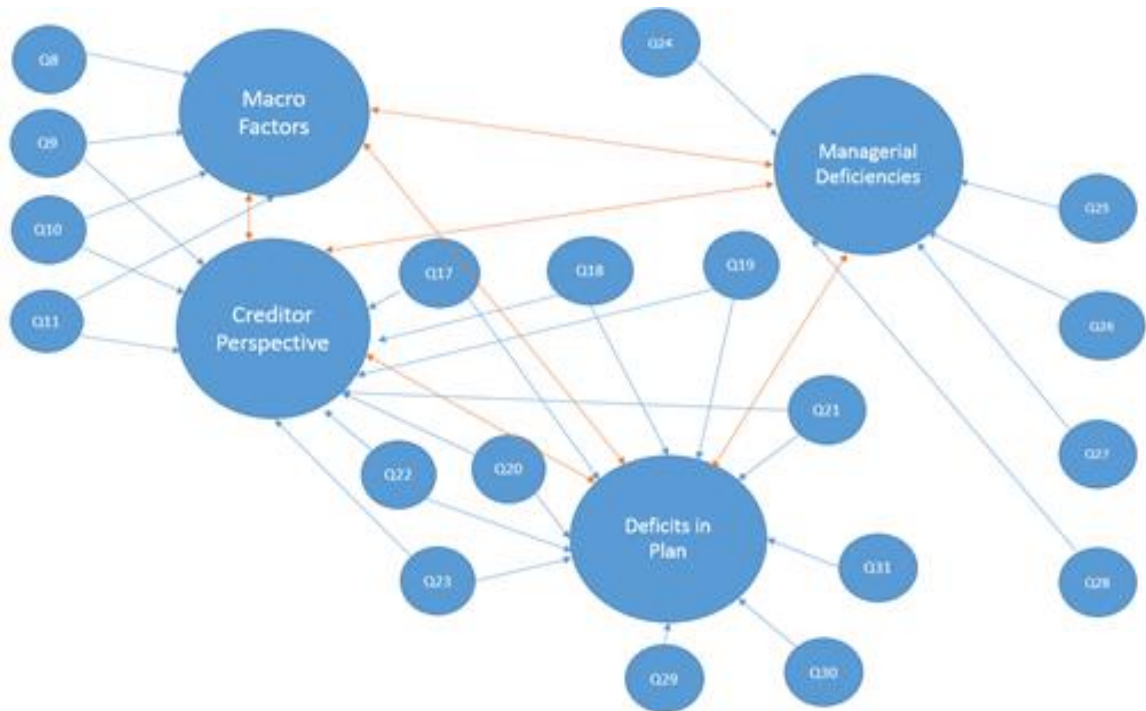


Figure 3: Initial Hypothesized Path Model
(Source: Author Research)

In the above **Figure 3** the interaction between the independent variables (questions posed to respondents) as well as the interaction between the variables is proposed as the initial hypothesis. Individual questions are mapped on to intermediate or latent variables, which are being modelled as Macro Factors, Creditor Perspective, and Deficits in Plan and Managerial Deficiencies. The latent variable definition is due to Dodge (2003). Factor Analytic models are further required to establish correlation between specific variables and conversely, variables which are uncorrelated cannot result in a latent variable, according to Tabachnick and Fidell (2001). Examples in the literature include latent variable modelling of Big 5 personality traits by Borsboom, Mellenbergh and van Heerden (2003).

2.6.7. Descriptive Statistics

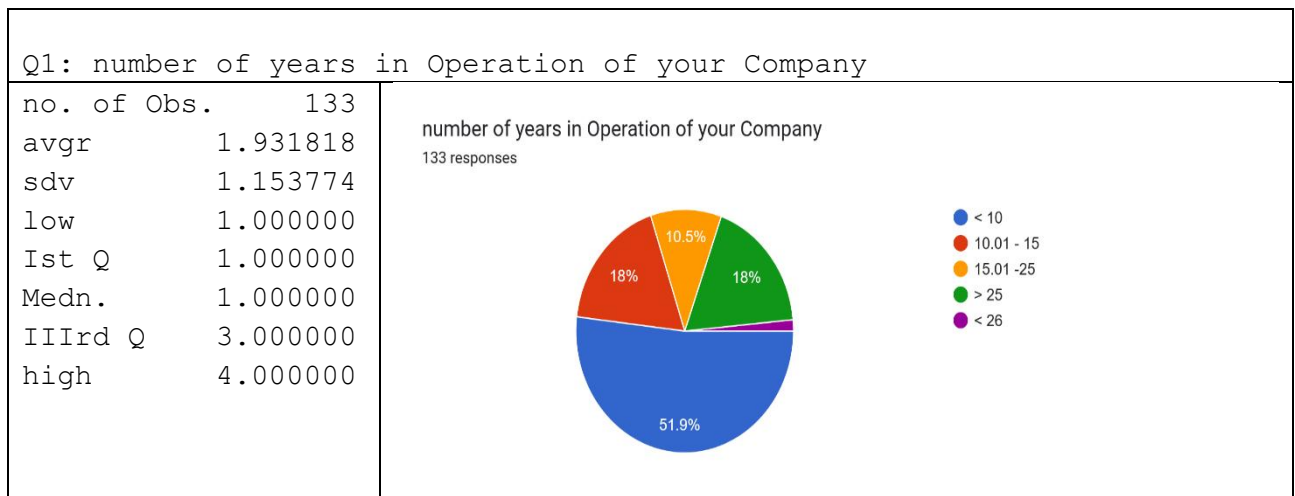


Figure 4: Q1: number of years in Operation of your Company

From **Figure 4**, where 133 responses are recorded, most firms are in operation for fewer than 10 years or 51.9% , followed by firms in operation between 10 and 15 years (18%) and few firms are in business for more than 25 years.

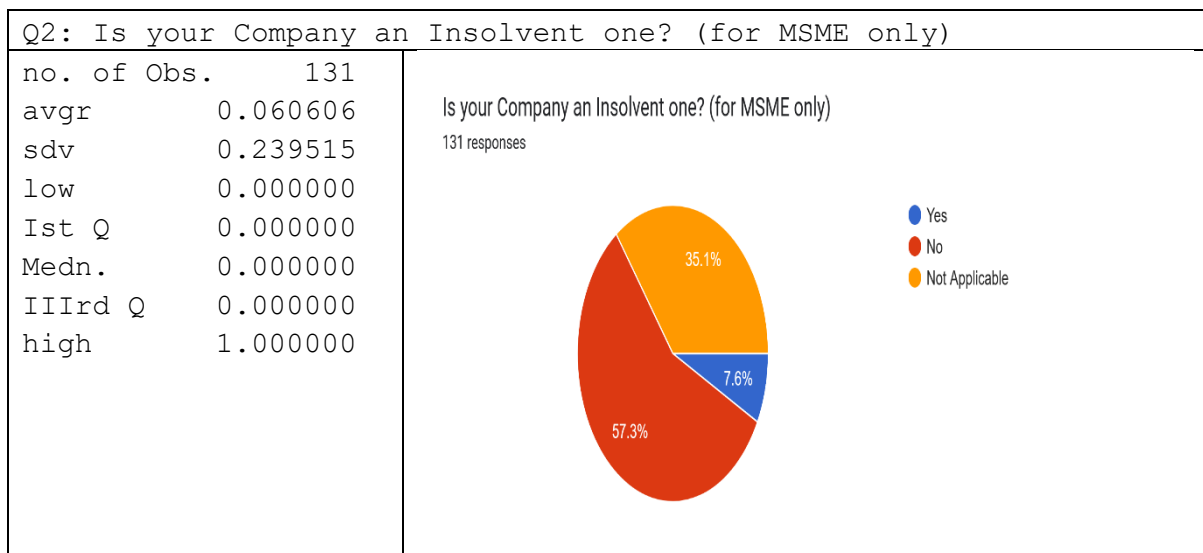


Figure 5: Q2: Is your Company an Insolvent one? (for MSME only)

From above **Figure 5**, where 131 responses are recorded, most firms are not insolvent (57.3 percent of 131 responses, or 75 firms) and second most is not-applicable, indicating the respondent is not a firm, or 46 respondents. Only 10 firms or 7.6 % of firms are insolvent from the sample taken.

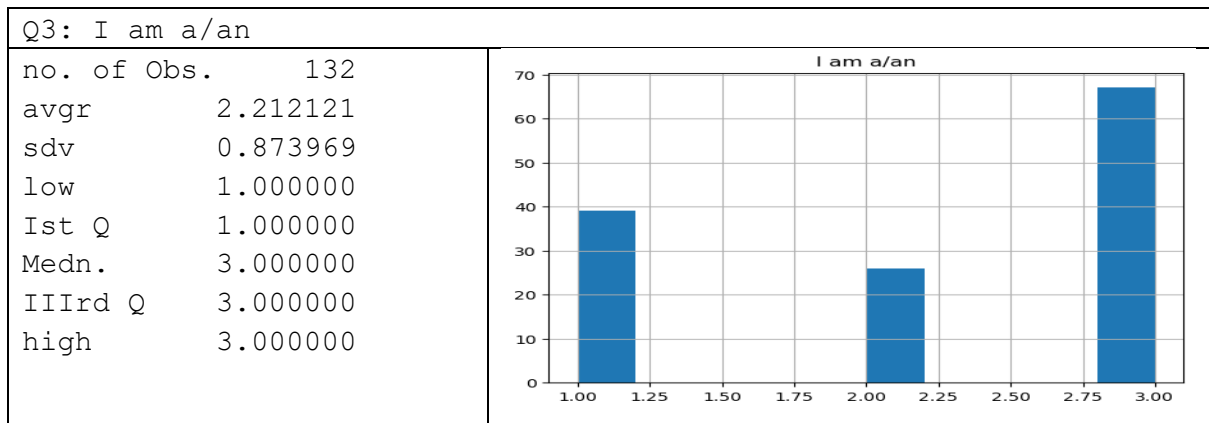


Figure 6: Q3: I am a/an

For the current survey, from **Figure 6**, the classification has been done into three main categories, with Category 1 including Bankers (Creditors) and Chartered Accountants, Category 2 including Insolvency Professionals and Lawyers and finally, Category 3 including MSME owners and Professionals in MSME sector. Totally, 38 were surveyed in Category 1, 26 in Category 2 and finally 68 in Category 3 for a total of 132 classifications. Only 132 responses were recorded for the Category of the respondent.

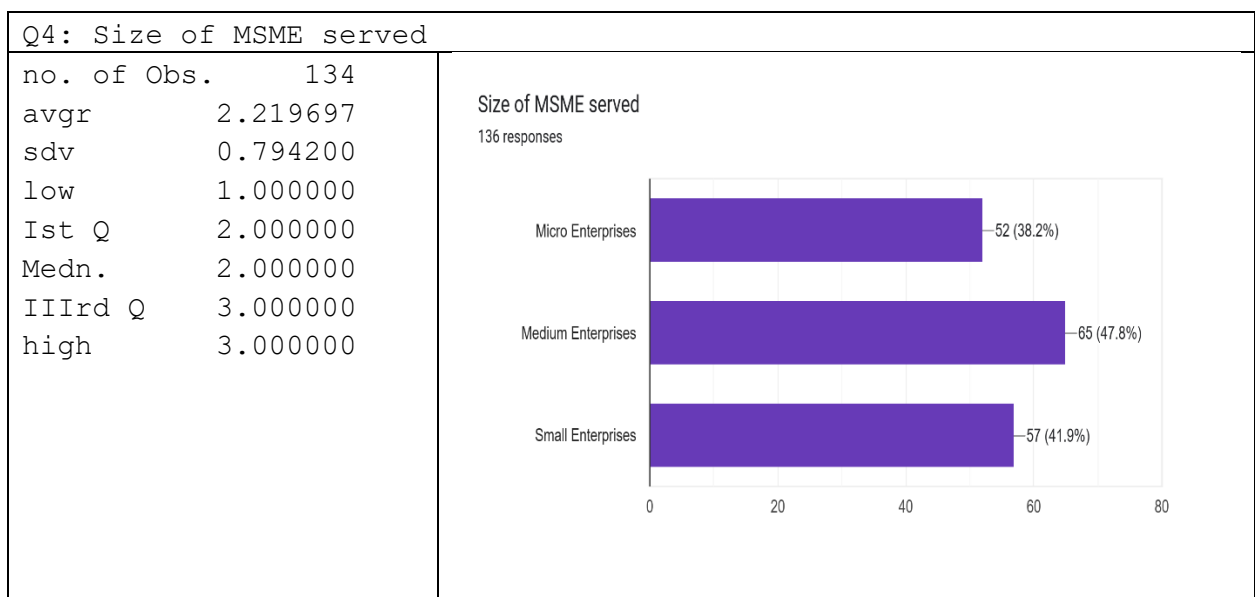


Figure 7: Q4: Size of MSME served

From **Figure 7**, 52 Micro, 65 medium and 57 small enterprises were surveyed, for a total of 136 responses obtained. Of the 136 respondents, 134 were valid responses.

Q5: Area of Operations in India

no. of Obs.	136
avgr	2.583333
sdv	1.204582
low	1.000000
Ist Q	2.000000
Medn.	2.000000
IIIrd Q	2.000000
high	5.000000

Area of Operations in India
136 responses

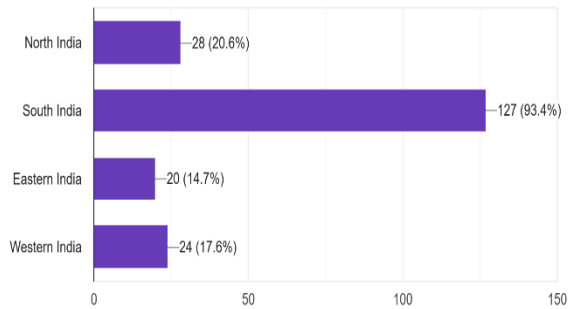


Figure 8: Q5: Area of Operations in India

From **Figure 8**, the area of operations of the respondent was largely South India (127 or 93.4%), followed by North India (28 or and then West followed by Eastern India. The reason the number of individually served regions does not add up to 136 is that some respondents serve multiple regions in India.

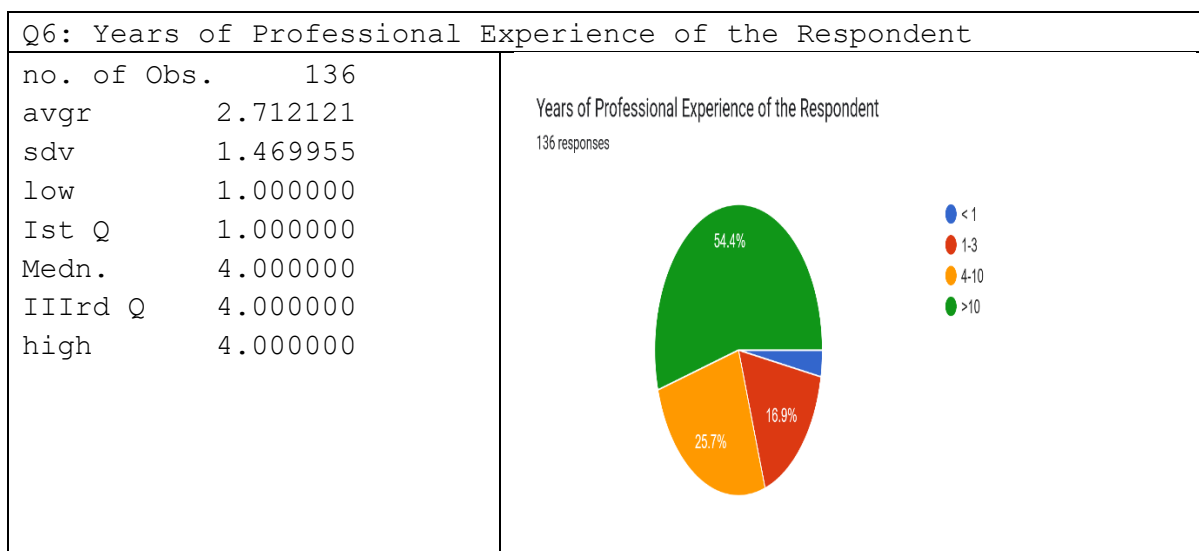


Figure 9: Q6: Years of Professional Experience of the Respondent

From **Figure 9**, maximum number of responses are for those with number of years of experience more than 10 years (54.4%) followed by 25.7% with 4-10 years of experience.

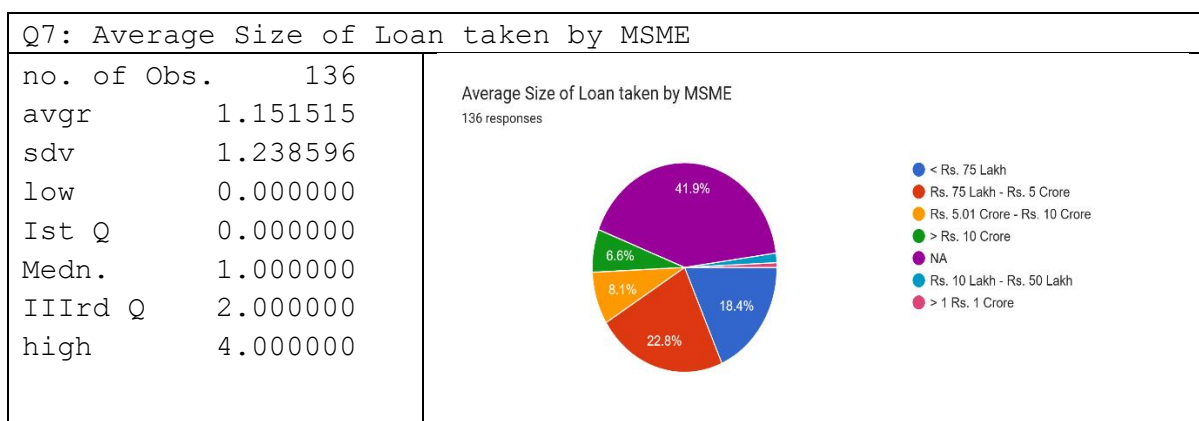


Figure 10: Q7: Average Size of Loan taken by MSME

From **Figure 10**, from 136 responses, it is observed that of the responses which have taken a loan, the maximum category of loans is from Rs. 75 Lakh to Rs. 5 Crore or 22.8% of respondents, followed by Rs. 10 Lakh to Rs. 50 Lakh or 18.4% of respondents.

Q8: Respondent perceives that General level of Awareness of PPIRP among MSME ecosystem stakeholders is low

no. of Obs.	136
avgr	3.863636
sdv	1.246508
low	1.000000
Ist Q	3.000000
Medn.	4.000000
IIIrd Q	5.000000
high	5.000000

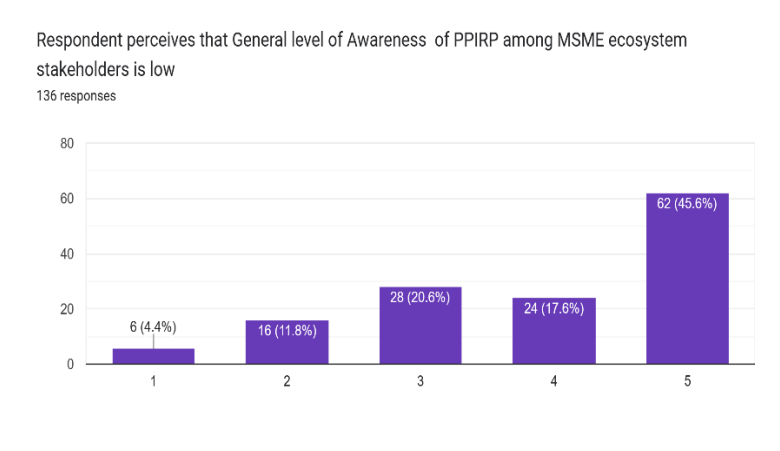


Figure 11: Q8: Respondent perceives General level of Awareness of PPIRP among MSME ecosystem stakeholders is low

From **Figure 11**, the level of Awareness among respondents about PPIRP is low, with a total of 86 respondents rating the level of Awareness with a score of 4 or 5. The Likert scale is used for the question, where 1 indicates high level of Awareness and 5 indicates a Low level of Awareness.

Q9: Respondent perceives PPIRP as new and unproven

no. of Obs.	136
avgr	3.613636
sdv	1.109623
low	1.000000
Ist Q	3.000000
Medn.	4.000000
IIIrd Q	5.000000
high	5.000000

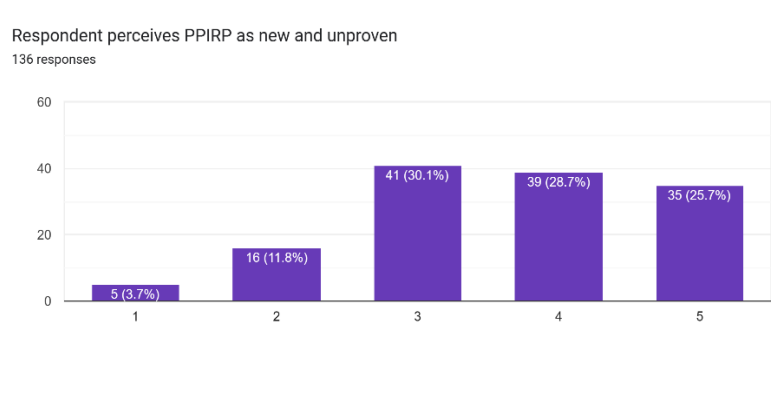


Figure 12: Q9: Respondent perceives PPIRP as new and unproven

From **Figure 12**, PPIRP is rated with a 4 or above on the Likert Scale by 71 respondents, where 1 indicates high level of provenness and 5 indicates low level of provenness of PPIRP.

Q10: Respondent perception that Legislative infrastructure for PPI RP is inadequate.

no. of Obs.	136
avgr	3.507576
sdv	1.087726
low	1.000000
Ist Q	3.000000
Medn.	4.000000
IIIrd Q	4.000000
high	5.000000

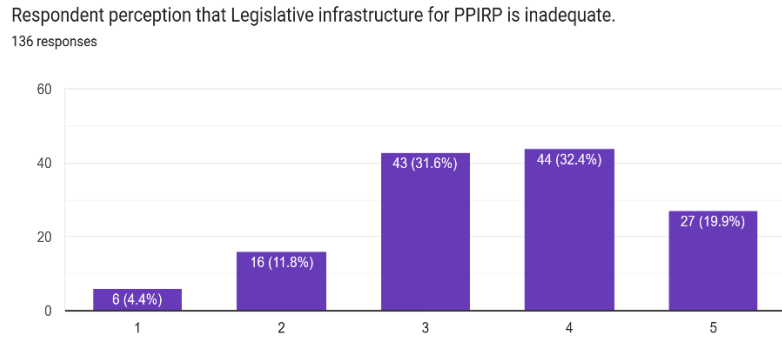


Figure 13: Q10: Respondent perception that Legislative infrastructure for PPIRP is inadequate.

From **Figure 13**, Legislative infrastructure is rated at 4 or higher on the Likert scale by 71 respondents, where 1 indicates strong Legislative infrastructure and 5 indicates weak Legislative infrastructure.

Q11: Respondent perception that PPIRP is an accelerated solution (time-constraint is an issue)

no. of Obs.	136
avgr	3.568182
sdv	1.085597
low	1.000000
Ist Q	3.000000
Medn.	4.000000
IIIrd Q	4.000000
high	5.000000

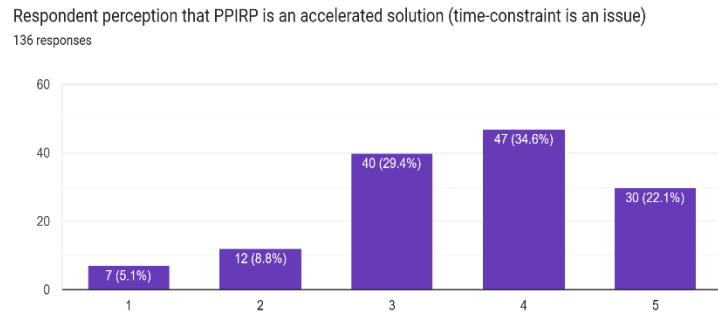


Figure 14: Q11: Respondent perception that PPIRP is an accelerated solution (time-constraint is an issue)

From **Figure 14**, PPIRP as an accelerated solution with time-constraint is rated at 4 or higher on the Likert scale by 80 respondents, where 1 indicates time-constraint not being an issue and 5 indicates that time-constraint is an important issue.

Q12: Respondent to Rank the Under-utilization of PPIRP by Root Causes as Listed Below [Time Constraint]

no. of Obs.	136
avgr	2.598485
sdv	1.527658
low	1.000000
Ist Q	1.000000
Medn.	2.000000
IIIrd Q	4.000000
high	5.000000

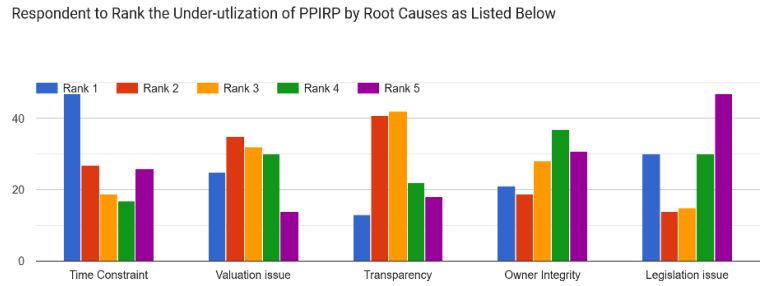


Figure 15: Q12: Respondent to Rank the Under-utilization of PPIRP by Root Causes as Listed Below [Time Constraint]

From **Figure 15**, PPIRP as an accelerated solution with time-constraint was ranked 1st by 47 respondents, and had the maximum number of 1st Rank selections than any of the other possible reasons for under-utilization.

Q13: Respondent to Rank the Under-utilization of PPIRP by Root Causes as Listed Below [Valuation issue]

no. of Obs.	136
avgr	2.810606
sdv	1.254808
low	1.000000
Ist Q	2.000000
Medn.	3.000000
IIIrd Q	4.000000
high	5.000000

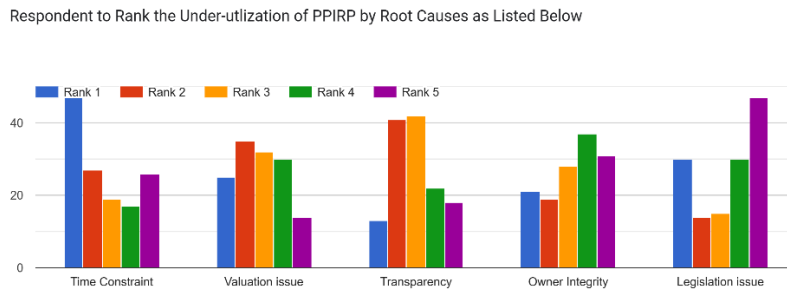


Figure 16: Q13: Respondent to Rank the Under-utilization of PPIRP by Root Causes as Listed Below [Valuation issue]

From **Figure 16**, Valuation as an issue for PPIRP was ranked 1st by 25 respondents, and had the third highest maximum number of 1st Rank selections, after Time-Constraint issue and Legislation issues.

Q14: Respondent to Rank the Under-utilization of PPIRP by Root Causes as Listed Below [Transparency]

no. of Obs.	136
avgr	2.924242
sdv	1.176236
low	1.000000
Ist Q	2.000000
Medn.	3.000000
IIIrd Q	4.000000
high	5.000000

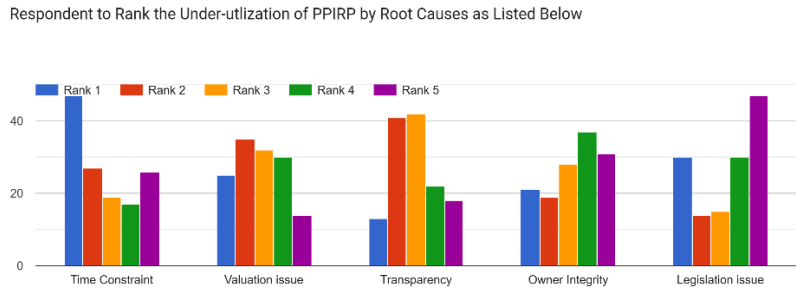


Figure 17: Q14: Respondent to Rank the Under-utilization of PPIRP by Root Causes as Listed Below [Transparency]

From **Figure 17**, Transparency as an issue for PPIRP was ranked 1st by only 13 respondents, was the least 1st Ranked reason for Under-utilization of PPIRP among all possible reasons.

Q15: Respondent to Rank the Under-utilization of PPIRP by Root Causes as Listed Below [Owner Integrity]

no. of Obs.	136
avgr	3.280303
sdv	1.383184
low	1.000000
Ist Q	2.000000
Medn.	3.500000
IIIrd Q	4.000000
high	5.000000

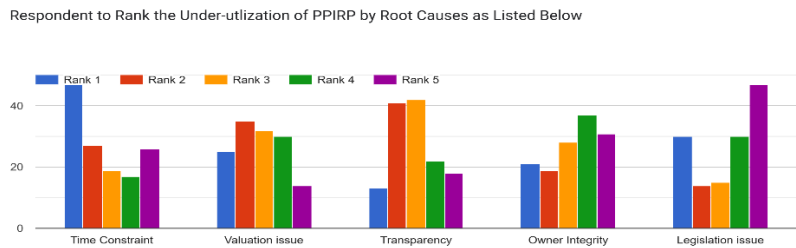


Figure 18: Q15: Respondent to Rank the Under-utilization of PPIRP by Root Causes as Listed Below [Owner Integrity]

From **Figure 18**, Owner-integrity as an issue for PPIRP was ranked 1st by 21 respondents, was the second least 1st Ranked reason for Under-utilization of PPIRP among all possible reasons.

Q16: Respondent to Rank the Under-utilization of PPIRP by Root Causes as Listed Below [Legislation issue]

no. of Obs.	136
avgr	3.386364
sdv	1.561208
low	1.000000
Ist Q	2.000000
Medn.	4.000000
IIIrd Q	5.000000
high	5.000000

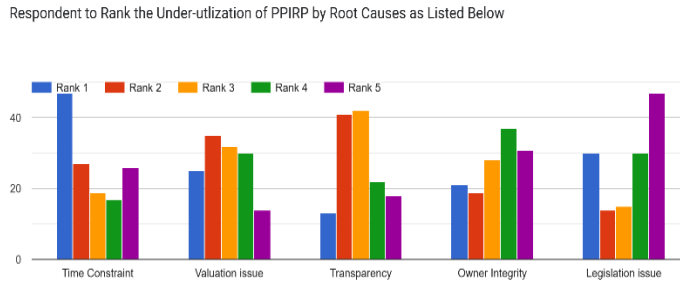


Figure 19: Q16: Respondent to Rank the Under-utilization of PPIRP by Root Causes as Listed Below [Legislation issue]

From **Figure 19**, Legislation as an issue for PPIRP was ranked 1st by 30 respondents, and was the second most 1st Ranked reason for Under-utilization of PPIRP among all possible reasons, only after Time-constraint.

Q17: Respondent perception on Creditor view of the Value of Fixed Assets of Insolvent Firm

no. of Obs.	136
avgr	3.075758
sdv	1.074487
low	1.000000
Ist Q	2.000000
Medn.	3.000000
IIIrd Q	4.000000
high	5.000000

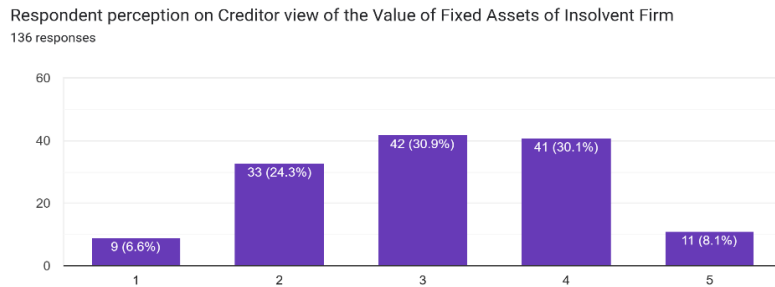


Figure 20: Q17: Respondent perception on Creditor view of the Value of Fixed Assets of Insolvent Firm

From **Figure 20**, Respondent perception on the Creditor view of Fixed asset valuation on the Likert scale as 1 (highly fair) to 5 (highly unfair) had an average value of 3, and 94 respondents gave the factor a score of 3 or higher.

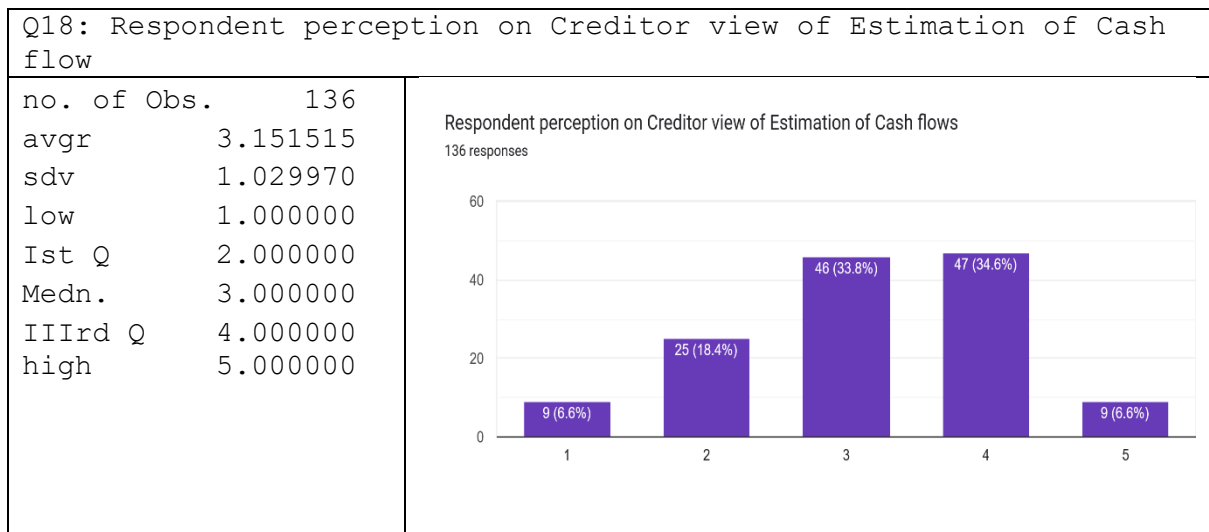


Figure 21: Q18: Respondent perception on Creditor view of Estimation of Cash flow

From **Figure 21**, Respondent perception on the Creditor view of Estimation of Cash flow on the Likert scale as 1 (highly accurate) to 5 (highly inaccurate) had an average value of 3.15, and 102 respondents gave the factor a score of 3 or higher.

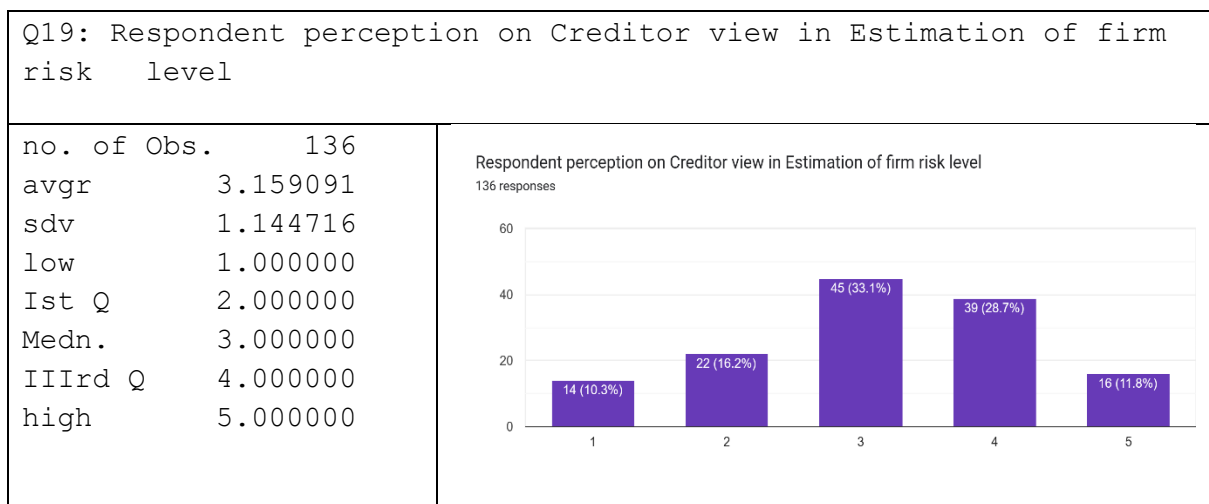


Figure 22: Q19: Respondent perception on Creditor view in Estimation of firm risk level

From **Figure 22**, Respondent perception on the Creditor view of Estimation of Firm risk level, on the Likert scale as 1 (properly estimated) to 5 (improperly estimated) had an average value of 3.15, and 102 respondents gave the factor a score of 3 or higher.

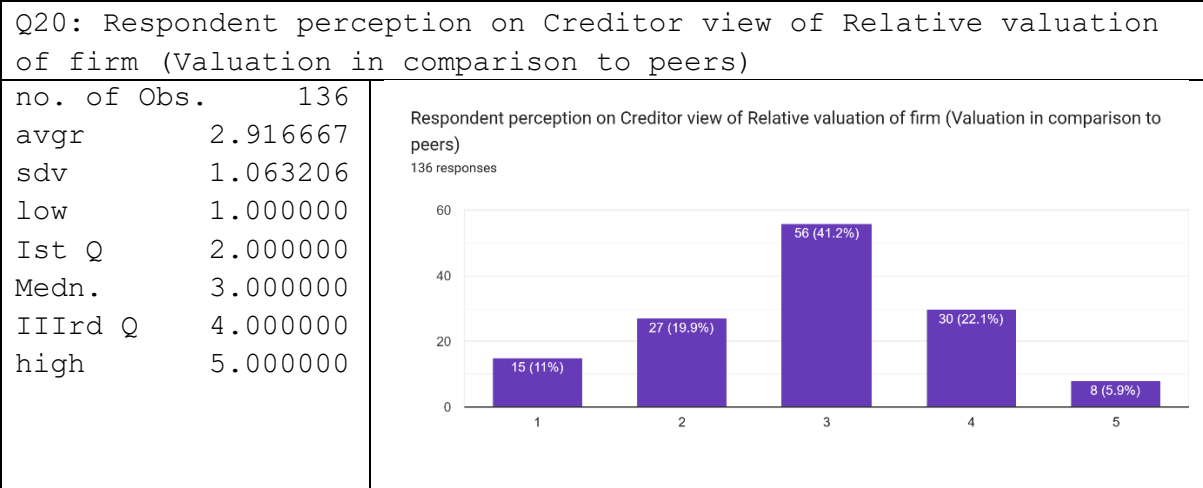


Figure 23: Q20: Respondent perception on Creditor view of Relative valuation of firm (Valuation in Comparison to peers)

From **Figure 23**, Respondent perception on the Creditor view of Relative valuation of firm, on the Likert scale as 1 (properly estimated) to 5 (improperly estimated) had an average value of 2.91, and 94 respondents gave the factor a score of 3 or higher.

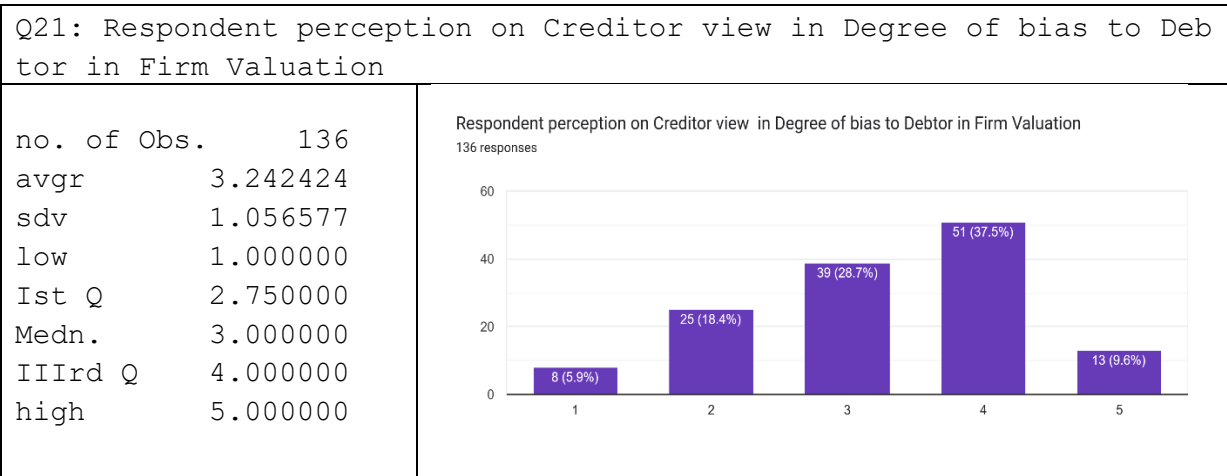


Figure 24: Q21: Respondent perception on Creditor view in Degree of bias to Debtor in Firm Valuation

From **Figure 24**, Respondent perception on the Creditor view of Degree of bias to Debtor, on the Likert scale as 1 (no bias) to 5 (high bias) had an average value of 3.24, and 94 respondents gave the factor a score of 3 or higher.

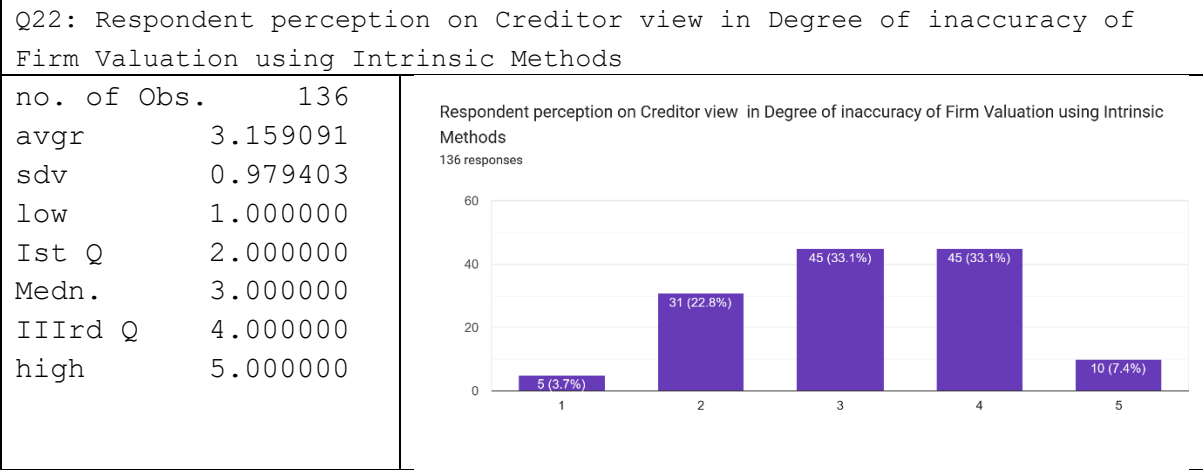


Figure 25: Q22: Respondent perception on Creditor view in Degree of inaccuracy of Firm Valuation using Intrinsic Methods

From **Figure 25**, Respondent perception on the Creditor view of Degree of inaccuracy of Firm Valuation using Intrinsic Methods, on the Likert scale as 1 (highly accurate) to 5 (highly inaccurate) had an average value of 3.15, and 100 respondents gave the factor a score of 3 or higher.

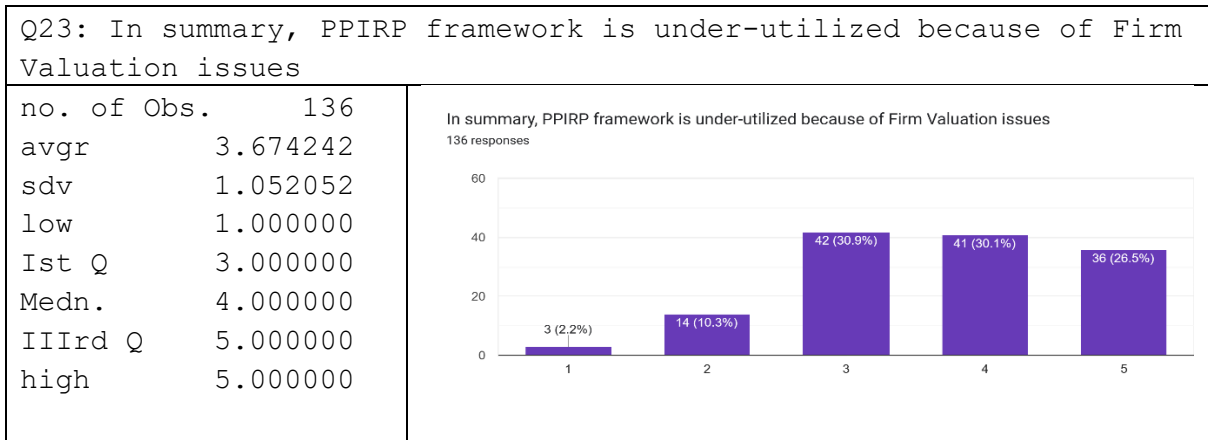


Figure 26: Q23: In summary, PPIRP framework is under-utilized because of Firm Valuation issues

From **Figure 26**, Respondent perception on the overall under-utilization of PPIRP owing to valuation issues, on the Likert scale as 1 (very unlikely) to 5 (very likely) had an average value of 3.67, and 120 respondents gave the factor a score of 3 or higher, indicating that valuation issues are likely cause for the under-utilization of PPIRP.

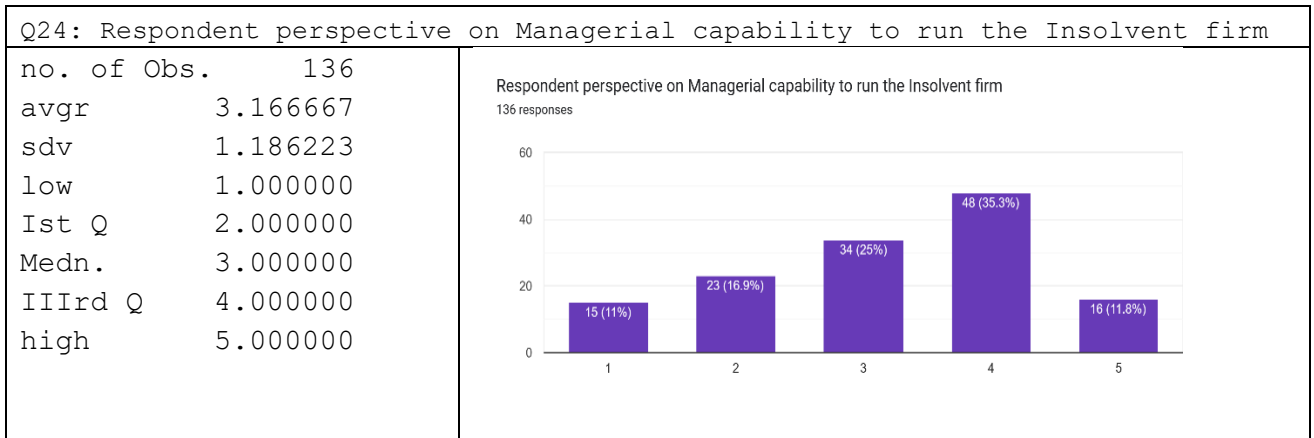


Figure 27: Q24: Respondent perspective on Managerial capability to run the Insolvent firm

From **Figure 27**, Respondent perception on the Managerial Capability to run the Insolvent firm, on the Likert scale as 1 (very high capability) to 5 (very low capability) had an average value of 3.17, and 98 respondents gave the factor a score of 3 or higher.

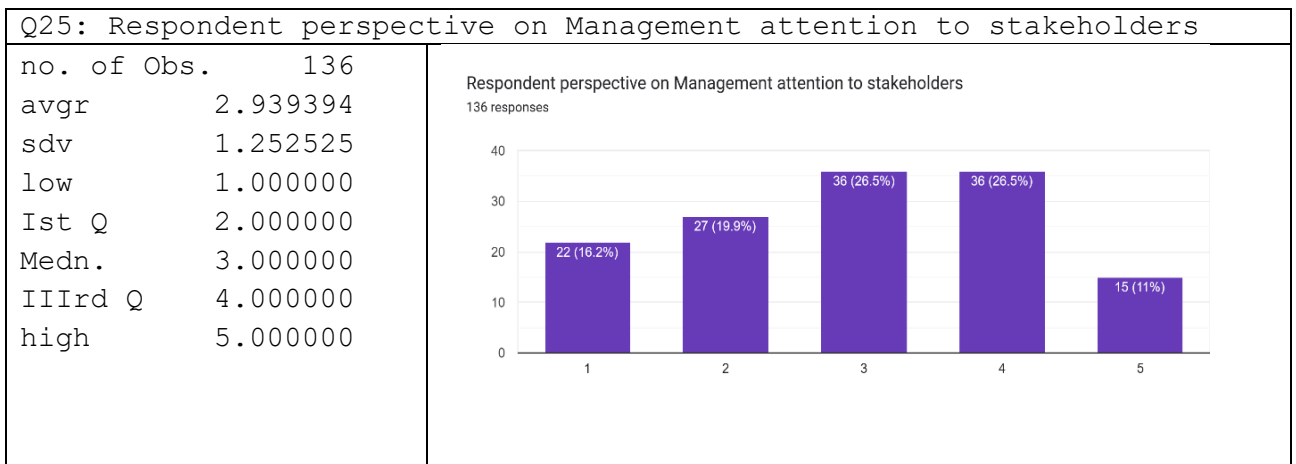


Figure 28: Q25: Respondent perspective on Management attention to stakeholders

From **Figure 28**, Respondent perception on the Managerial attention to stakeholders, on the Likert scale as 1 (very high attention) to 5 (very low attention) had an average value of 2.93, and 87 respondents gave the factor a score of 3 or higher.

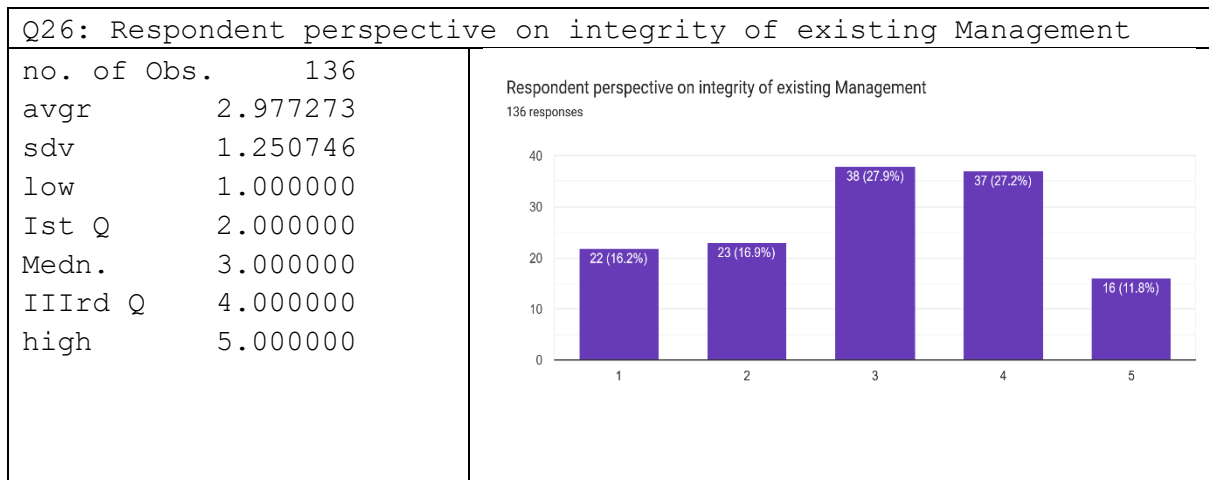


Figure 29: Q26: Respondent perspective on integrity of existing Management

From **Figure 29**, Respondent perception on the integrity of existing Management, on the Likert scale as 1 (very high integrity) to 5 (very low integrity) had an average value of 2.97, and 91 respondents gave the factor a score of 3 or higher.

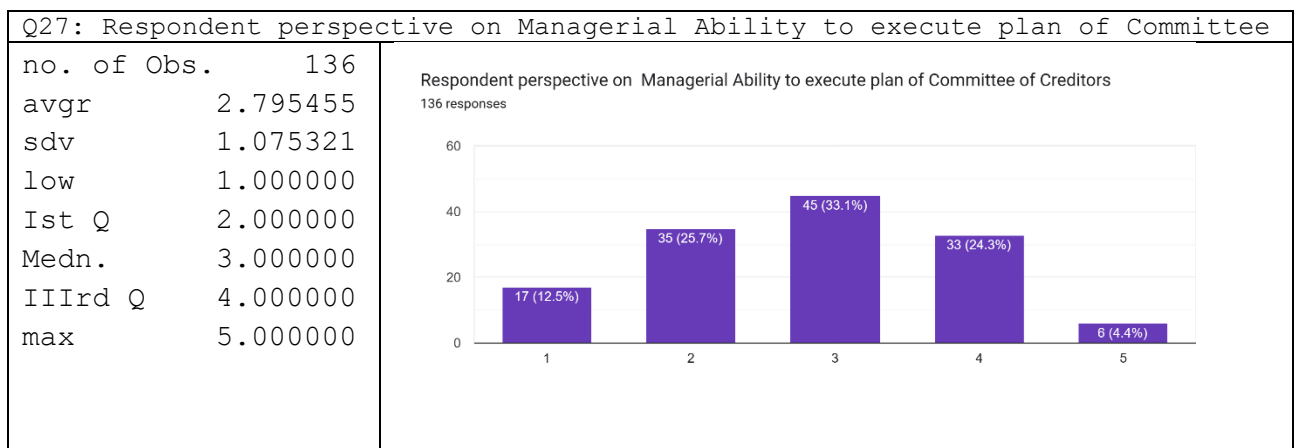


Figure 30: Q27: Respondent perspective on Managerial Ability to execute plan of Committee

From **Figure 30**, Respondent perception on the ability of Management to execute plan of Committee, on the Likert scale as 1 (very high ability) to 5 (very low ability) had an average value of 2.79, and 91 respondents gave the factor a score of 3 or higher.

Q28: Respondent perspective on desire of existing Management to retain control of operations

no. of Obs.	136
avgr	3.545455
sdv	1.244000
low	1.000000
Ist Q	3.000000
Medn.	4.000000
IIIrd Q	5.000000
high	5.000000

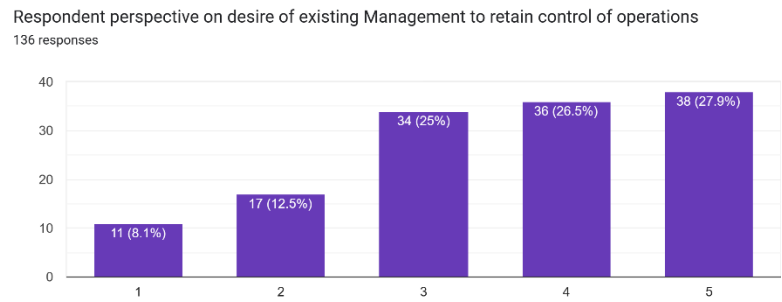


Figure 31: Q28: Respondent perspective on desire of existing Management to retain control of operations

From **Figure 31**, Respondent perception on the desire of Management to retain control of operations, on the Likert scale as 1 (very high desire) to 5 (very low desire) had an average value of 3.54, and 110 respondents gave the factor a score of 3 or higher.

Q29: Respondent perspective on CoC plans to address the needs equitably, for all creditors

no. of Obs.	136
avgr	3.007576
sdv	1.275106
low	1.000000
Ist Q	2.000000
Medn.	3.000000
IIIrd Q	4.000000
high	5.000000

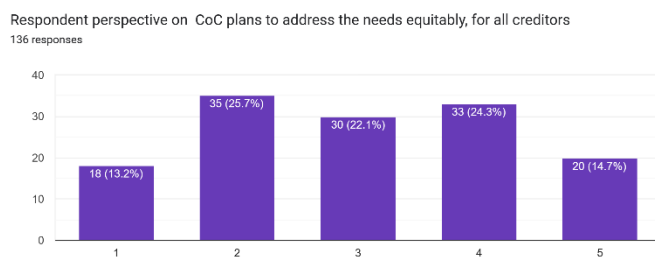


Figure 32: Q29: Respondent perspective on CoC plans to address the needs equitably, for all creditors

From **Figure 32**, Respondent perception on the CoC plans to address needs equitably for all creditors, on the Likert scale as 1 (very high desire) to 5 (very low desire) had an average value of 3.00, and 83 respondents gave the factor a score of 3 or higher.

Q30: Respondent perspective on CoC plans can be feasibly implemented with Firm Valuation constraints

no. of Obs.	136
avgr	2.856061
sdv	1.063859
low	1.000000
Ist Q	2.000000
Medn.	3.000000
IIIrd Q	3.000000
high	5.000000

Respondent perspective on CoC plans can be feasibly implemented with Firm Valuation constraints
136 responses

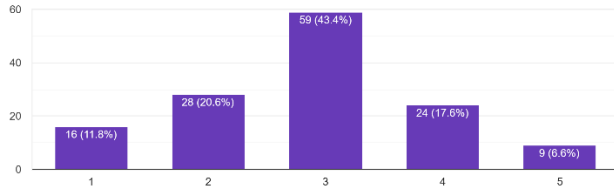


Figure 33: Q30: Respondent perspective on CoC plans can be feasibly implemented with Firm Valuation constraints

From **Figure 33**, Respondent perception on the CoC plans can be feasibly implemented with Valuation Constraints, on the Likert scale as 1 (very likely implemented) to 5 (very unlikely to be implemented) had an average value of 2.85, and 92 respondents gave the factor a score of 3 or higher.

Q31: Respondent perspective that CoC plans can be feasibly implemented with time constraints

no. of Obs.	136
avgr	3.037879
sdv	1.080043
low	1.000000
Ist Q	2.000000
Medn.	3.000000
IIIrd Q	4.000000
high	5.000000

Respondent perspective that CoC plans can be feasibly implemented with time constraints
136 responses

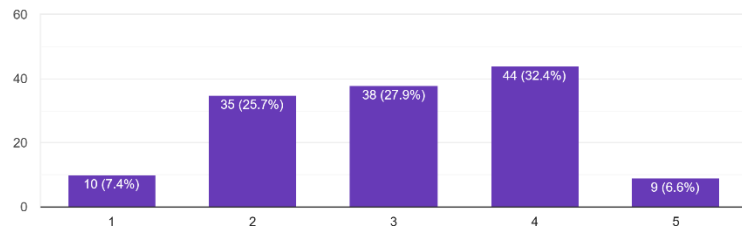


Figure 34: Q31: Respondent perspective that CoC plans can be feasibly implemented with time constraints

From **Figure 34**, Respondent perception on the CoC plans can be feasibly implemented with Time Constraints, on the Likert scale as 1 (very likely implemented) to 5 (very unlikely to be implemented) had an average value of 3.03, and 91 respondents gave the factor a score of 3 or higher.

2.6.8. SEM being used in this Research

Of the 20 questions being hypothesized as relevant in **Figure 3**, the questions Q8, Q9, Q10 and Q11 are not found to be associated with the Creditor Perspective. Further, they are relevant to the Macro factors construct and are modeled as such. Similarly, questions Q17, Q18, Q19, Q20, Q21, Q22 and Q23 are found to be relevant only to the Creditor perspective and not to the Deficits in plan, as was hypothesized in Figure 3. On the contrary, in support of the hypothesis in **Figure 3**, Deficits in plan are impacted by questions Q29, Q30 and Q31. Similarly, questions Q24, Q25, Q26, Q27 and Q28 are found to be relevant for Managerial Deficiency construct, as originally hypothesized in **Figure 3**.

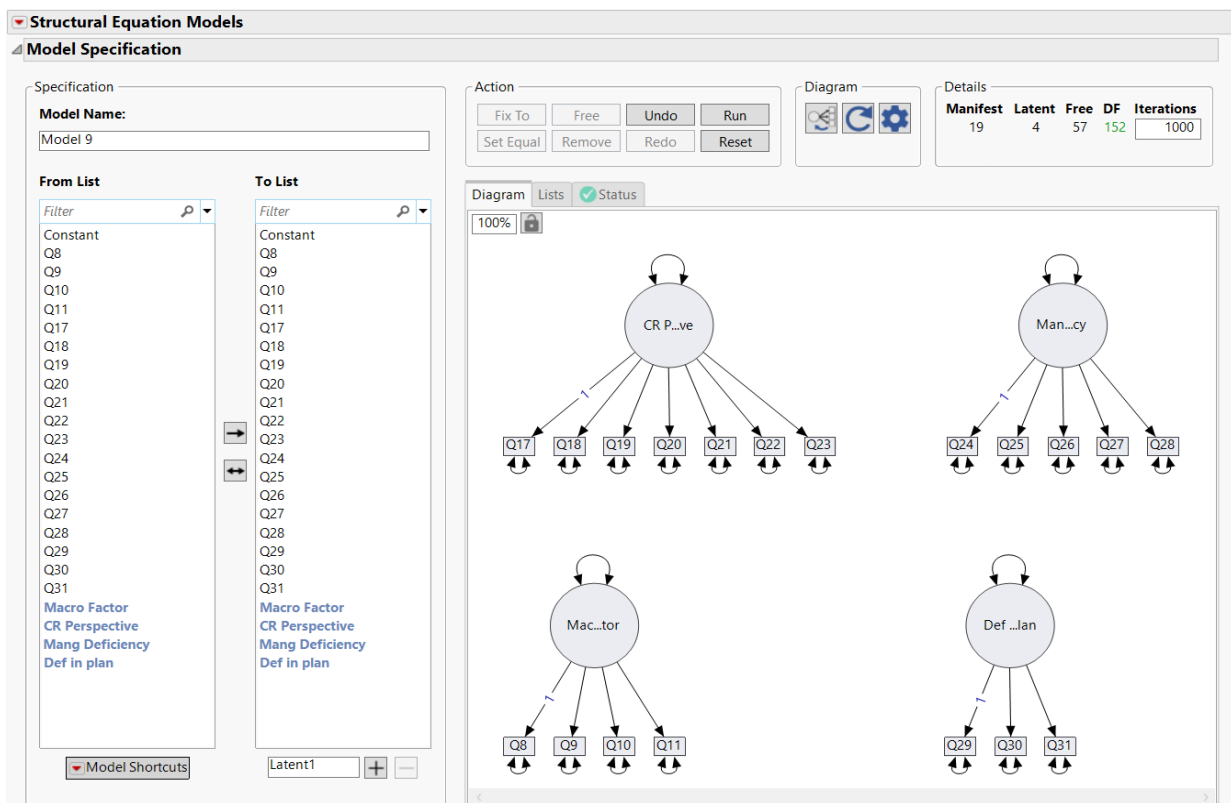


Figure 35: SEM being used in this Research

1. The **latent variables** or **constructs** in this output are Macro Factor, Creditors Perspective, Managerial Deficiency, and Deficiency in Plan. These constructs are not directly observed but are inferred from the observed indicators or manifest variables.
2. The **manifest variables** in this output are the observed indicators that are used to measure the constructs. Each manifest variable represents a specific item or question in the data. For example, Q8, Q9, Q10, and Q11 are the manifest variables for the construct Macro Factor, Q17 to Q23 for Creditor Perspective, Q24 to Q28 for Managerial Deficiency, and Q29 to Q31 for Deficiency in plan.

These factors are considered **constructs** while preparing the SEM

- Macro Factors (Variables: Q8 to Q11)
- Creditor Perspective (Variables: Q17 to Q23)
- Managerial Deficiency (Variables: Q24 to Q28)
- Deficiency in Plan (Variables: Q29 to Q30)

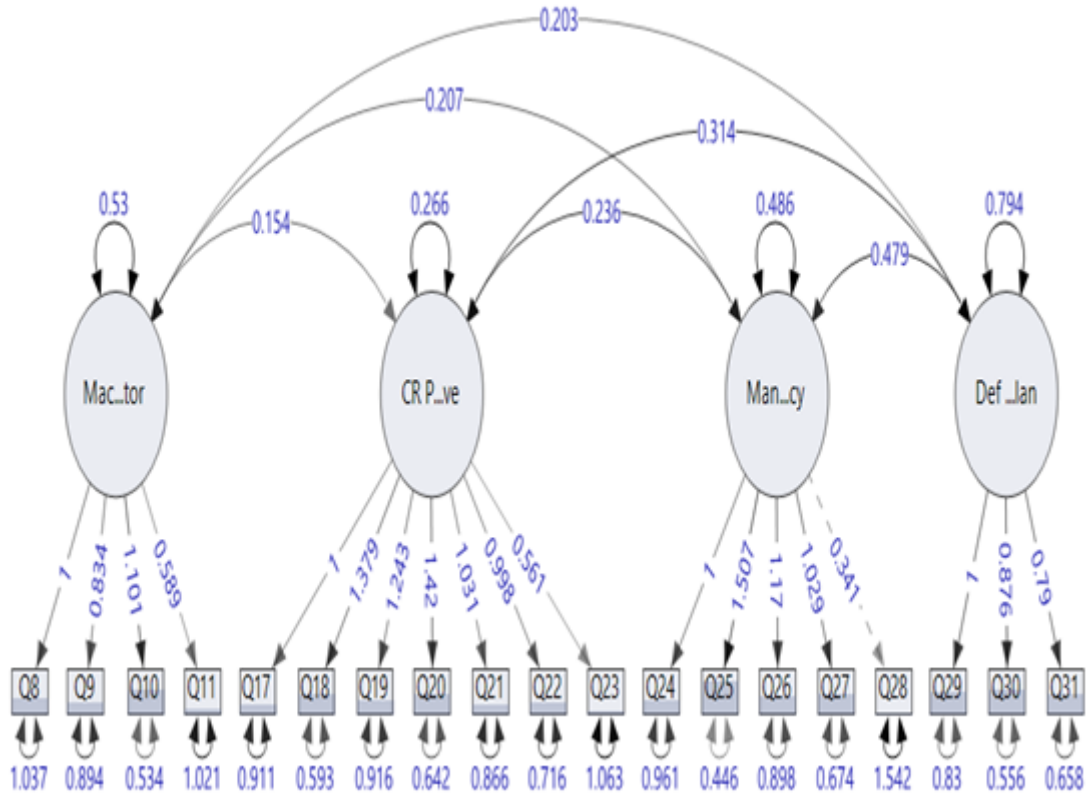


Figure 36: Correlation among the constructs

The **Figure 36** above shows the path diagram of how the constructs are related using a correlation, it is found that the Macro factor has the least correlation with other constructs and hence we need to find which construct is majorly affected by Macro factors with trial-and-error methods.

2.6.9. Analysis of Results from SEM

Assessment or Measurement Model in SEM refers to the framework used to measure or assess latent constructs (variables that are not directly observable) based on observable indicators. It involves the establishment of the relationship between the latent constructs and the indicators used to measure them. A comparison of Confirmatory Factor Analysis (CFA) versus Confirmatory Composite Analysis (CCA), according to Hair, Howard and Nitzl (2020) emphasizes the use of Assessment Measurement Model in SEM. Indicator reliability, composite reliability, and construct matrix reliability are three measures used to assess the quality and reliability of the measurement model. The Root Mean Square Error of Approximation (RMSEA) is a widely used goodness-of-fit index in the context of Structural Equation Modeling (SEM). It measures the discrepancy between the observed data and the model-predicted covariance matrix per degree of freedom. Here are some key references related to RMSEA in SEM, according to Steiger (1990), Browne (1993), Hu and Bentler (1999), Byrne (2010), MacCullum, Browne and Sugawara (1996), McDonald and Marsh (1990).

1. Indicator Reliability: Indicator reliability refers to the extent to which the observed indicators accurately and consistently measure the underlying latent construct. It is typically assessed using measures such as item-level reliability or internal consistency reliability. Commonly used indicators of reliability include Cronbach's alpha, McDonald's omega, or inter-item correlations. Higher indicator reliability indicates that the indicators provide consistent and reliable measurements of the construct. These values can be interpreted as the squared correlation between the latent variable and its observed indicators. Higher indicator reliability values indicate stronger and more reliable relationships between the latent variable and its indicators. Indicator reliability refers to the extent to which the observed indicators accurately and consistently measure the underlying latent construct. It is typically assessed using measures such as item-level reliability or internal consistency reliability. Commonly used indicators of reliability include Cronbach's alpha, McDonald's omega, or inter-item correlations. Higher indicator reliability indicates that the indicators provide consistent and reliable measurements of the construct. The indicator reliability values indicate the reliability or consistency of the observed indicators in measuring the corresponding latent variables, according to Hair et al. (2014), Raykov (2001), Bollen (1989), Bentler (1990), Raykov and Marcoulides (2006), Fornell and Larcker (1981), McDonald RP (1999).

2. Composite Reliability: Composite reliability is a measure of the internal consistency and reliability of a latent construct. It considers the interrelationships between the indicators of a construct and provides an overall assessment of the reliability of the composite score. Composite reliability is often calculated using methods like coefficient alpha or composite reliability coefficient. A higher composite

reliability value suggests that the indicators are consistent in measuring the construct, according to Fornell and Larcker (1981), Raykov (1997), Hair et al. (2011), Gefen et al. (2011), Hair et al. (2016), Diamantopoulos and Siguaw (2006), Bagozzi and Yi.

3. Construct Matrix Reliability: Construct matrix reliability, also known as convergent validity, assesses the extent to which the indicators within a construct correlate with each other. It examines the degree of shared variance between the indicators, indicating how well they represent the underlying construct. Construct matrix reliability is usually assessed using techniques like average variance extracted (AVE) or factor loadings. Higher construct matrix reliability indicates that the indicators are measuring the same underlying construct. A construct validity matrix is a tool used to evaluate the construct validity of measurement items or indicators. We assess the relationships between latent constructs (unobserved variables) and their observed indicators or measures. The construct validity matrix provides a systematic approach to examine the convergent and discriminant validity of these indicators. The construct validity matrix typically consists of a table where the rows and columns represent the indicators or items of the latent constructs. The matrix entries contain correlation coefficients or factor loadings that indicate the strength of the relationship between each indicator and its corresponding construct.

The primary uses of a construct validity matrix in the assessment measurement model of SEM include:

3.1 Convergent Validity Assessment: The construct validity matrix helps evaluate the degree to which different indicators of the same construct are positively correlated with each other. Higher correlation coefficients or factor loadings between indicators and their construct signify stronger convergent validity.

3.2 Discriminant Validity Assessment: The matrix allows researchers to examine the relationships between indicators of different constructs. Lower correlation coefficients or factor loadings between indicators of different constructs indicate stronger discriminant validity, suggesting that the constructs are distinct from one another.

By examining the construct validity matrix, we can identify problematic indicators that may not adequately measure their intended construct. They can then refine or remove these indicators to improve the overall validity and reliability of the measurement model.

2.6.10. Output from SEM and Observations

Construct Validity Matrix:

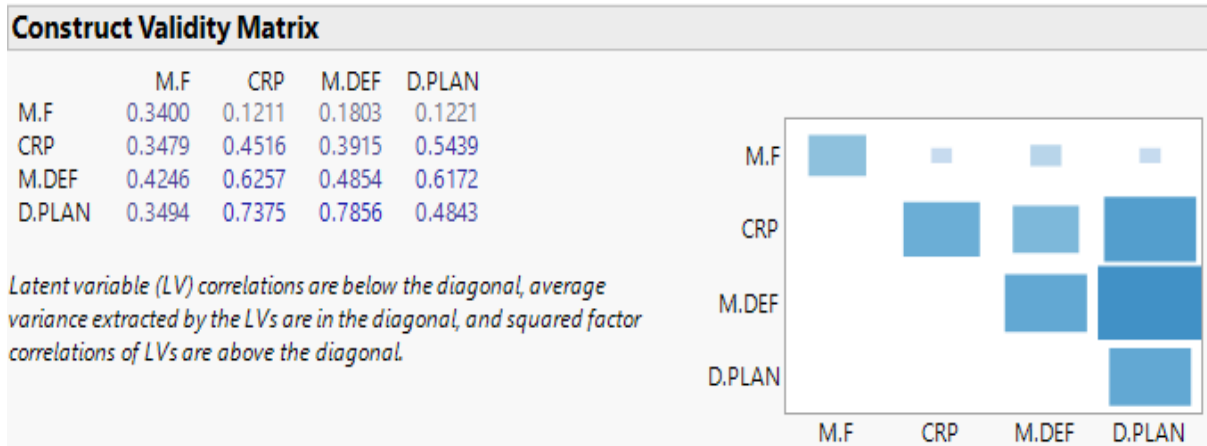


Figure 37: Construct Validity Matrix

Indicator Reliability:

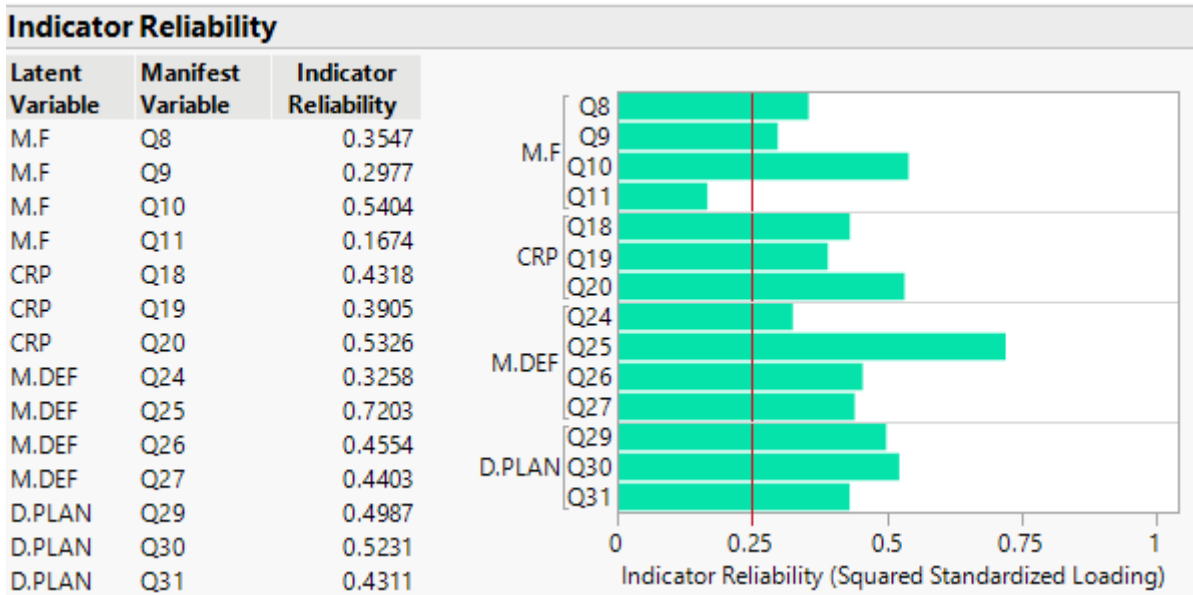


Figure 38: Assess Measurement Model

The histogram in **Figure 38** shows the amount of influence each variable has on its respective constructs. Q11, Q17, Q23, and Q28 have much lower influence compared to other variables. The latent variable Macro Factor, the indicator reliabilities are 0.3547 for Q8, 0.2977 for Q9, 0.5404 for Q10, and 0.1674 for Q11. This suggests that Q10 has the highest indicator reliability, indicating a stronger and more consistent relationship with the Macro Factor compared to the other indicators. Similarly, Q18 and Q20 have the highest indicator reliability

in the context of Creditors Perspective while Q25 and Q27 have the highest indicator reliability in the context of Managerial Deficiency and Q30 has the highest indicator reliability in the context of Deficiency in plan.

We can clearly observe that a few variables under each construct are less significant as they fall behind the threshold line, these variables (Q11, Q17, Q21, Q23 and Q28) along with variables that are very close to the line can be removed for better reliability of data under each construct. These questions are removed due to the several iterations on models and not fully shown in **Figure 38**.

It is important to consider these indicator reliabilities along with other measures, such as composite reliability, and construct matrix reliability to assess the overall quality of the measurement model in SEM.

Composite Reliability:

Composite reliability is a measure of the internal consistency and reliability of a latent construct. It considers the interrelationships between the indicators of a construct and provides an overall assessment of the reliability of the composite score. Composite reliability is often calculated using methods like coefficient alpha or composite reliability coefficient. A higher composite reliability value suggests that the indicators are consistent in measuring the construct.

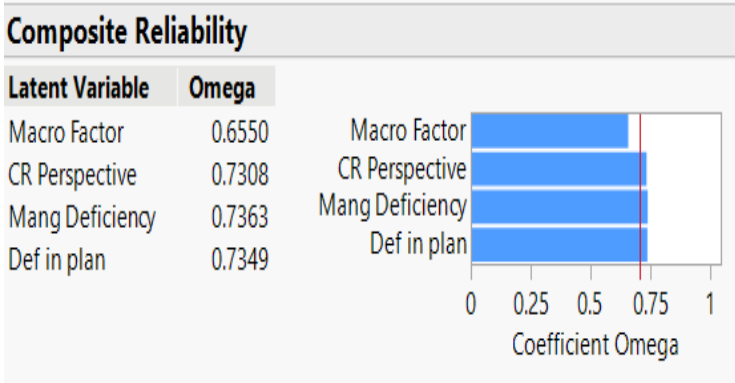


Figure 39: Composite Reliability

It is clearly seen that all the constructs except Macro factors cross the standard line and hence they are highly significant. We cannot neglect the fact that all the constructs have Omega values > 0.5, The research area being new, we can still consider the Macro factor has a certain influence on PPIRP. The above output represents the Omega values for each latent variable in a SEM analysis.

- a. **Latent Variable:** The latent variables listed in the output are Macro Factor (M.F), Creditor Perspective (CRP), Managerial Deficiency (M.DEF), and Deficiency in Plan (D.PLAN.). These latent variables are not directly observed but are inferred from the observed indicators (manifest variables).

- b. **Omega:** The Omega values represent the composite reliability or internal consistency reliability of each latent variable. Omega is an alternative measure to Cronbach's alpha and is used to assess the reliability or consistency of the latent construct. Higher Omega values indicate greater internal consistency or reliability.

In this analysis, the Omega value for the latent variable Macro Factor is 0.6643, for Creditor Perspective is 0.7110, for Managerial Deficiency is 0.7870, and for Deficiency in plan is 0.7377. These values suggest that the latent variables have reasonably good internal consistency, indicating that the observed indicators within each latent variable are consistent in measuring the underlying construct.

Note: It is important to note that while Omega provides an assessment of internal consistency, it is just one measure of reliability. It is recommended to consider other reliability measures, such as Cronbach's alpha, to obtain a comprehensive evaluation of the reliability of the latent variables in the SEM model.

Construct Maximal Reliability:

Construct maximal reliability, also known as convergent validity, assesses the extent to which the indicators within a construct correlate with each other. It examines the degree of shared variance between the indicators, indicating how well they represent the underlying construct. Construct maximal reliability is usually assessed using techniques like Average Variance Extracted (AVE) or factor loadings. Higher construct maximal reliability indicates that the indicators are measuring the same underlying construct.

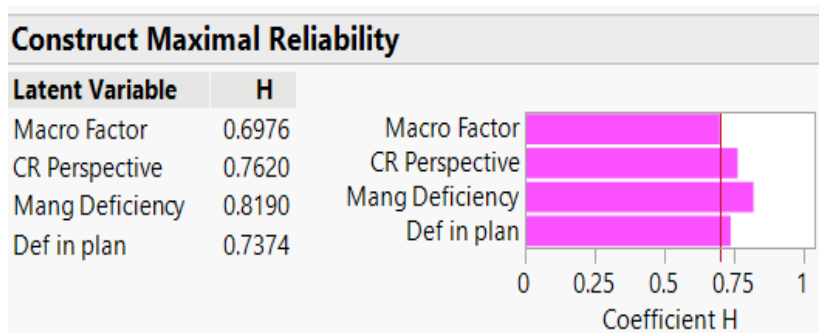


Figure 40: Construct Maximal Reliability

The output represents the H (or sometimes denoted as h) values for each latent variable in a structural equation modelling (SEM) analysis. The H value is an estimate of the construct reliability or composite reliability.

- a. **Latent Variable:** The latent variables listed in the output are Macro Factor, Creditor Perspective, Managerial Deficiency, and Deficiency in Plan. These latent variables represent the underlying constructs that are not directly observed but are inferred from the observed indicators (manifest variables).

- b. **H (Construct Reliability):** The H values represent the construct reliability or composite reliability of each latent variable. Higher H values indicate greater reliability or internal consistency of the latent variable.

The H value for the latent variable Macro Factor is 0.6976, for Creditor Perspective is 0.7620, for Managerial Deficiency, is 0.8190, and for Deficiency in Plan is 0.7374. These values suggest that the latent variables have good internal consistency, indicating that the observed indicators within each latent variable are reliable in measuring the underlying construct.

Table 3: Comparison of Models and the key comparison indicators

no	Model Name	-2 Log Lkhd	no of parms	AICC	AICc Wt	BIC	ChiSq	DF	Prob> ChiSq	CFI	RMSE A	Low 90%	Upper 90%
1	Unrestricted	5102.2	119.0	7720.2	0.0	5683.2	0.0	0.0	.	1.0	0.00	0.0	0.0
2	Independence	5703.1	28.0	5774.9	0.0	5839.8	600.9	91.0	<.0001	0.00	0.20	0.2	0.2
3	CORR	5194.2	48.0	5346.8	0.0	5428.5	92.0	71.0	0.0	0.96	0.04	0.0	0.1
4	T 1	5202.8	45.0	5341.0	0.0	5422.5	100.6	74.0	0.0	0.95	0.05	0.0	0.1
5	T 2	5194.8	46.0	5337.6	0.0	5419.4	92.6	73.0	0.1	0.96	0.04	0.0	0.1
6	T 3	5194.8	46.0	5337.6	0.0	5419.4	92.6	73.0	0.1	0.96	0.04	0.0	0.1
7	T 4	5187.2	47.0	5334.9	0.1	5416.7	85.0	72.0	0.1	0.97	0.03	0.0	0.1
8	T 5	5179.4	48.0	5332.1	0.2	5413.8	77.2	71.0	0.3	0.98	0.02	0.0	0.1
9	T 6	5172.2	49.0	5330.0	0.7	5411.5	70.1	70.0	0.5	0.99	0.00	0.0	0.1

Table 2 above shows the various models which were run and the associated CFI, RMSEA and other important statistics useful in determination of model fit. From **Table 2**, the RMSEA has become progressively smaller and the CFI has become progressively larger, as we move downward from Model T1 to Model T6. Below in **Table 3** through **Table 9**, the various observations from the SEM output are listed.

Table 4: Final Model Selection: T6

Sample Size	132
Rows with Missing	0
-2 Log Likelihood	5172.2409
Iterations	191
Number of Parameters	49
AICc	5329.997
BIC	5411.4982
Chi-square	70.060871
DF	70
Prob>ChiSq	0.4754722
CFI	0.9998806
RMSEA	0.0025667
Lower 90%	0
Upper 90%	0.0508151

3. Summary of Fit Data:

Sample Size: The dataset used for the analysis contains 132 cases (observations).

Prob>ChiSq: The p-value associated with the Chi-square test is 0.475. It indicates the probability of obtaining the observed Chi-square value by chance alone. A p-value greater than 0.05 suggests that the model fits the data reasonably well.

CFI (Comparative Fit Index): The CFI value is 0.999. CFI is a goodness-of-fit index that compares the fit of the estimated model to a baseline model (usually the independence model). Values closer to 1 indicate a better fit, and a CFI above 0.95 is generally considered acceptable.

RMSEA (Root Mean Square Error of Approximation): The RMSEA value is 0.0025. RMSEA is a measure of the discrepancy between the model and the observed covariance matrix, adjusting for model complexity. Smaller values (close to 0) indicate better fit.

Lower 90% and Upper 90%: These values represent the lower and upper bounds of the 90% confidence interval for the RMSEA. The interval ranges from 0 to 0.05, indicating a very narrow range and suggesting high precision in the RMSEA estimate.

The SEM model shows excellent fit to the data, as indicated by the fit indices:

- a. The CFI value of 0.999 indicates a very close fit to the baseline model.
- b. The RMSEA value of 0.0025 suggests a very good fit to the observed covariance matrix.
- c. The Chi-square test is not statistically significant (Prob>ChiSq = 0.475), indicating that the model fits the data well.

Overall, the model provides a good representation of the relationships between the latent variables and their indicators in the dataset. The small RMSEA and non-significant Chi-square indicate a good fit, while the high CFI value suggests a strong correspondence between the model and the observed data. The model's adequacy and appropriateness should be further assessed using additional fit indices and model diagnostics to ensure its reliability and validity. **Figure 41** below displays the path diagram of the SEM.

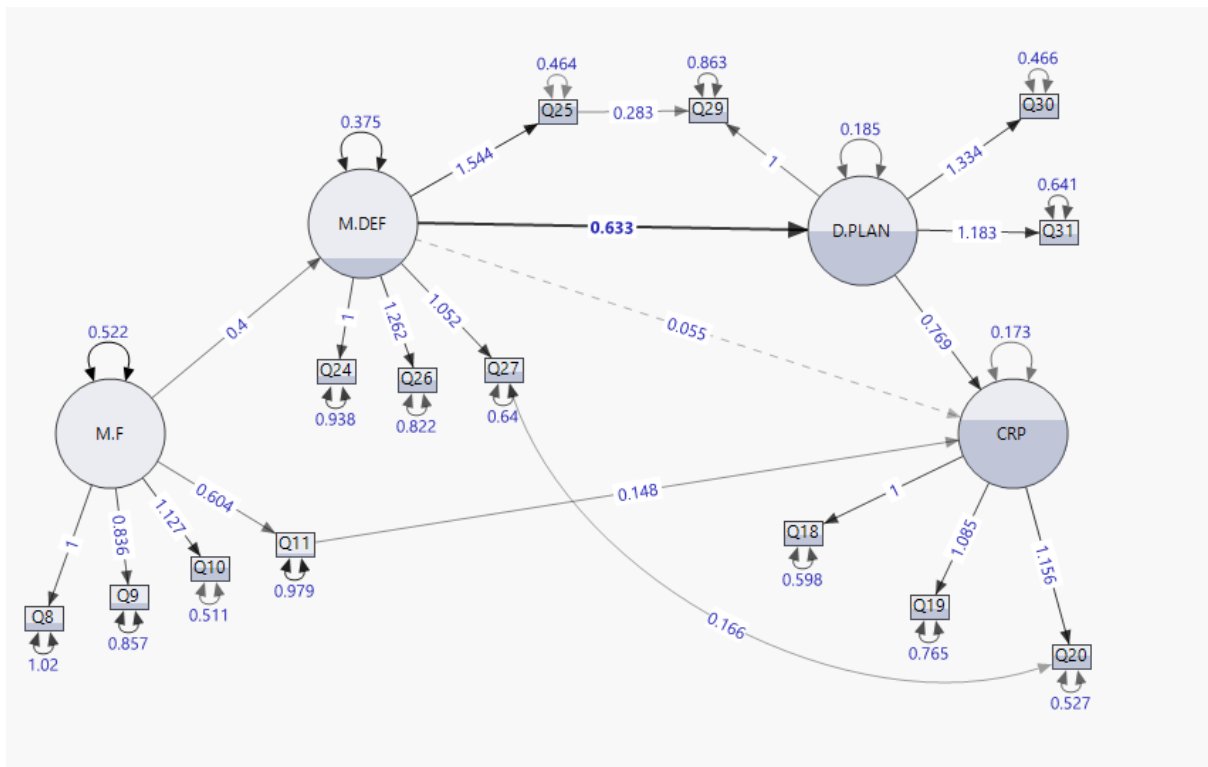


Figure 41 : Path Diagram of SEM

Table 5: Variance of Questions and Constructs

Variations	Estimate	Std Error	Wald Z	Prob> Z
Q8 ↔ Q8	0.9949932	0.1759869	5.6537927	<.0001*
Q9 ↔ Q9	0.8581954	0.1297614	6.6136431	<.0001*
Q10 ↔ Q10	0.5396762	0.1435664	3.7590704	0.0002*
Q11 ↔ Q11	0.9738456	0.1322197	7.3653607	<.0001*
Q18 ↔ Q18	0.5982298	0.0980949	6.0984807	<.0001*
Q19 ↔ Q19	0.7926094	0.1222615	6.4829022	<.0001*
Q20 ↔ Q20	0.5244027	0.1010854	5.1877215	<.0001*
Q24 ↔ Q24	0.9414346	0.1268013	7.4244851	<.0001*
Q25 ↔ Q25	0.4354482	0.1011841	4.3035252	<.0001*
Q26 ↔ Q26	0.8455606	0.1230382	6.8723439	<.0001*
Q27 ↔ Q27	0.6423381	0.0932045	6.8917075	<.0001*
Q29 ↔ Q29	0.8089242	0.1335458	6.0572774	<.0001*
Q30 ↔ Q30	0.5356843	0.0904557	5.9220629	<.0001*
Q31 ↔ Q31	0.6585584	0.100099	6.5790686	<.0001*
M.F ↔ M.F	0.5470179	0.1923493	2.8438769	0.0045*
CRP ↔ CRP	0.4545709	0.1247861	3.6428008	0.0003*
M.DEF ↔ M.DEF	0.45503	0.1369971	3.3214574	0.0009*
D.PLAN ↔ D.PLAN	0.8046548	0.1935316	4.1577426	<.0001*

Table 6: Mean and Intercept Values

Means/Intercepts	Estimate	Std Error	Wald Z	Prob> Z
Constant → Q8	3.8636364	0.1080828	35.746989	<.0001*
Constant → Q9	3.6136364	0.0962137	37.55842	<.0001*
Constant → Q10	3.5075758	0.0943151	37.189964	<.0001*
Constant → Q11	3.5681818	0.0941305	37.906741	<.0001*
Constant → Q18	2.6223969	0.2120657	12.365967	<.0001*
Constant → Q19	2.584951	0.236078	10.949565	<.0001*
Constant → Q20	2.3050957	0.237561	9.7031733	<.0001*
Constant → Q24	3.1666667	0.1028556	30.787495	<.0001*
Constant → Q25	2.939394	0.1086045	27.065111	<.0001*
Constant → Q26	2.9772727	0.1084503	27.452876	<.0001*
Constant → Q27	2.7954546	0.0932655	29.97308	<.0001*
Constant → Q29	2.1758561	0.3032897	7.1741836	<.0001*
Constant → Q30	2.8560606	0.0922456	30.961487	<.0001*
Constant → Q31	3.0378788	0.0936489	32.439013	<.0001*

Table 7: Construct Loadings

Loadings	Estimate	Std Error	Wald Z	Prob> Z
M.F → Q8	1	.	.	.
M.F → Q9	0.8357785	0.1862416	4.4876047	<.0001*
M.F → Q10	1.1272093	0.275194	4.0960539	<.0001*
M.F → Q11	0.6040728	0.1894648	3.1883119	0.0014*
CRP → Q18	1	.	.	.
CRP → Q19	1.0850882	0.1868968	5.8058154	<.0001*
CRP → Q20	1.1558305	0.1901341	6.0790271	<.0001*
M.DEF → Q24	1	.	.	.
M.DEF → Q25	1.5437896	0.2406874	6.4140869	<.0001*
M.DEF → Q26	1.2621171	0.2230677	5.6579993	<.0001*
M.DEF → Q27	1.0523724	0.1846063	5.7006314	<.0001*
D.PLAN → Q29	1	.	.	.
D.PLAN → Q30	1.3341667	0.3334544	4.0010465	<.0001*
D.PLAN → Q31	1.1827057	0.289195	4.0896477	<.0001*

Table 8: Construct Regressions

Regressions	Estimate	Std Error	Wald Z	Prob> Z
D.PLAN → CRP	0.7689378	0.265951	2.8912764	0.0038*
M.DEF → D.PLAN	0.6332615	0.1906702	3.3212398	0.0009*
M.F → M.DEF	0.4002232	0.1271807	3.1468856	0.0017*
Q25 → Q29	0.2829562	0.097806	2.8930354	0.0038*
Q11 → CRP	0.1482879	0.0541131	2.7403324	0.0061*
M.DEF → CRP	0.0547143	0.1741532	0.3141734	0.7534

Table 9: Construct Covariances

Covariances	Estimate	Std Error	Wald Z	Prob> Z
Q27 ↔ Q20	0.166183	0.065192	2.5491326	0.0108*

3.1.1. Interpretation and summary of SEM data

Table 4 displays the Variance of Questions and Constructs, **Table 5** shows the Mean and Intercept Values, **Table 6** shows Construct Loadings and **Table 8** shows Construct Covariances.

The regression coefficients (path coefficients) in a Structural Equation Model (SEM) involves four latent variables: M.F, CRP, D.PLAN and M.DEF. Each coefficient represents the strength and direction of the relationship between the latent variables, indicating how much change in the dependent variable (manifest variable) is expected per one-unit change in the independent variable (another manifest or latent variable). The coefficients are accompanied by their standard errors, Wald Z statistics, and p-values. **Table 7** is referred to for the Construct regressions and to examine causality among the constructs.

a. D.PLAN → CRP

- Regression Estimate: 0.77
- Std Error: 0.27
- Wald Z: 2.891
- Prob>|Z|: 0.0038

Interpretation: From **Table 7**, the regression coefficient from D.PLAN to CRP is 0.77. This value indicates that for every one-unit increase in the D.PLAN latent variable, we would expect a 0.77 unit increase in the CRP latent variable. The positive coefficient suggests a positive relationship between D.PLAN and CRP. The standard error of the estimate is 0.27, indicating the uncertainty or variability in the coefficient. The Wald Z value of 2.891 and the associated p-value of 0.0038 indicate that the relationship between D.PLAN and CRP is statistically significant. Therefore, it suggests that the deficiency in plan of the Insolvency Resolution has a positive and significant impact on the creditor perspective, therefore causing a lower level of adoption in PPIRP. Going one step deeper and examining the questions related to D.PLAN, Q30 has the highest loading of 1.334 (p-value = 0.00). Respondent reaction on Firm Valuation Constraint has the most significant impact on the D.PLAN and by examining the Descriptive Statistics of Q30, it can be inferred that concern on firm valuation constraint can be an influencing variable on the D.PLAN. Further, Q31 has a statistically significant impact on D.PLAN with the second highest loading of 1.18 (p-value = 0.00) suggesting that Time constraint can be a concern, leading to deficiency in plan which in turn influences the creditor perspective, leading to lower adoption of PPIRP. Finally,

Q29 is significantly related to D.PLAN (p-value = 0.00) and it can be inferred that one of the reasons that the plan is deficient is that it needs to equitably address needs of all creditors. In summary, deficiency in plan has a statistically and positive impact on the creditor perspective and the deficiency in plan needs to be addressed by giving attention to Q29, Q30 and Q31.

- b. M.DEF → D.PLAN
 - Regression Estimate: 0.633
 - Std Error: 0.190
 - Wald Z: 3.32
 - Prob>|Z|: 0.0009

Interpretation: From **Table 7**, the regression coefficient from M.DEF to D.PLAN is 0.633. This value suggests that for every one-unit increase in the M.F latent variable, we would expect a 0.633 unit increase in the D.PLAN latent variable. The positive coefficient indicates a positive relationship between M.DEF and D.PLAN. The standard error of the estimate is 0.190, indicating the uncertainty in the coefficient. The Wald Z value of 3.32 and the associated p-value of 0.0009 suggest that the relationship between M.DEF and D.PLAN is statistically significant. Going one step deeper and examining the questions related to M.DEF, it is observed that Q25 has the highest loading of 1.54 (p-value = 0.0001), indicating that Management attention to stakeholders is an influencing factor in defining Managerial Deficiency. From the descriptive statistics in Figure 28, the mean value of the variable related to attention to stakeholders obtained a score of 2.9 which indicates that the attention to stakeholders is likely weak and could be strengthened further. The second highest loading is from Q26 which has a value of 1.26 (p-value = 0.00) and this suggests again that Management integrity issues may affect the Managerial deficiency latent construct. Finally, Q24 has a loading of 1.0 and it suggests that Managerial incapability to continue operations is a factor in measurement of Managerial Deficiency. In summary, increased attention to stakeholder, improved integrity and better competence could be useful in improving the Managerial deficiency which in turn could improve the deficiency in the planning process.

- c. M.F → M.DEF
 - Regression Estimate: 0.400
 - Std Error: 0.127
 - Wald Z: 3.14
 - Prob>|Z|: 0.0017

Interpretation: From **Table 7**, the regression coefficient from M.F to M.DEF is 0.400. (p-value = 0.0017). This means that for every one-unit increase in the Macro Factor Latent Variable, we would expect a 0.400 unit increase in the Managerial Deficiency latent variable. The positive coefficient indicates a positive relationship between M.F and M.DEF. The standard error of the estimate is 0.127, reflecting the uncertainty in the

coefficient. The Wald Z value of 3.14 and the associated p-value of 0.0017 indicate that the relationship between M.F and M.DEF is statistically significant. In probing the M.F causal factors further, Q10 has a coefficient of 1.12 and associated p-value of 0.00 indicating that it is statistically significant in influencing the Macro factor latent variable, implying that Legislative infrastructure is weak and needs improvement. This aspect of weak legislative infrastructure is further corroborated by the descriptive statistics of Q10 in Figure 13, where the average value is 3.5. The second variable impacting M.F is Q9 and this implies that the fact that PPIRP is new and unproven has a positive impact on the latent factor related to M.F (Coefficient = 0.83 and p-value = 0.00) indicating that more cases of PPIRP need to be implemented before large scale adoption can happen. Again, the descriptive statistics of Q9, with an average value of 3.6 is a corroborating observation. Q11 also has a positive influence on the latent variable M.F indicating that time-constraint on M.F, with coefficient value = 0.60 (p-value = 0.0014). Finally, Q8 influences M.F and this is corroborated by the high average value of 3.9 from the descriptive statistics in **Figure 11**.

In addition, from **Table 7**, Q25 has a moderate positive influence on Q29 (coefficient = 0.28 and p-value = 0.0038), Q11 has a weak moderate positive influence on CRP (coefficient = 0.15 and p-value = 0.0061). It is noteworthy that the weak influence of 0.05 on CRP and this is statistically insignificant (p-value = 0.75) so it may be safely ignored for analysis.

4. Conclusion and Future Direction of Research

It is evident from this research that PPIRP has a serious awareness problem. This is corroborated heavily by the descriptive statistics in **Figure 11** which shows high average value of 3.8. This lack of awareness could stem from various causes. The first important cause could be lack of education and not being able to discern the important features and advantages that this process offers, in comparison to other resolution processes. It could also stem from factors related to lack of adoption of PPIRP by the banking and Chartered Accountant community, who remain the primary initiators in the Resolution process. Lack of awareness could also stem from a lack of interest in learning new avenues from resolution of insolvency. We suggest a three-pronged approach to solve the awareness issue. First, Government agencies should work closely with Industry Associations to propagate the idea of PPIRP resolution. The education seminars and webinars should explain the main features of the package and should help MSME adopt the process on wider/broader scale. Second, the fear factor from the process should be removed. As Shankar and Rout (2022) state, fear of hair-cut can be a major deterrent in awareness generation and then in adoption. Therefore, methods to allay the fear factor of PPIRP should be implemented, which could again include more education and information being provided to MSME and Industry Associations. Finally, Bankers and Chartered Accountants, Insolvency Professionals should be asked to propagate the idea of PPIRP and the benefits associated with it. Further Research can focus on root causes related to awareness of PPIRP and how it could be improved further.

Figure 12 suggests that PPIRP is new and unproven and with an average score of 3.6 it is suggestive that steps should be taken for the creditor community that PPIRP can be beneficial and can be implemented with support from the creditor and banking fraternities.

Figure 13 suggests that PPIRP Legislative infrastructure is inadequate and with an average score of 3.5 it is suggestive that steps should be taken for the perception of adequate Legislative infrastructure should be created so that Creditors are more comfortable with the process.

From **Figure 15**, it is evident that Respondents have considered the PPIRP to be a time-constrained solution and therefore may lead to lower adoption. In fact, 47 respondents gave it the top rank for under-utilization of PPIRP among 136 respondents. So, this may be an issue for policy makers to investigate, as to how to alter the perception of PPIRP as a time-efficient rather than time constrained process. This time-constrained issue is further corroborated by the average score of 3.6 in **Figure 14**.

Addressing the socio-economic impact of PPIRP underscores the importance of reducing the stigma associated with corporate insolvency to foster entrepreneurship, innovation, and economic growth.

The SEM model shows significant relationships between the latent variables: M.F, M.DEF, CRP and D.PLAN. Specifically:

- M.F has statistically significant and positive influence on M.DEF.
- M.DEF has statistically significant and positive influence on D.PLAN.
- D.PLAN has statistically significant and positive influence on CRP.

It may be hence concluded that Macro-factors pertaining to PPIRP such as Awareness, Legislative Infrastructure, Newness, and unproven nature of PPIRP together with Time-constraint cause an overall Managerial deficiency in addressing the Insolvency problem. Managerial deficiency, it may be recalled is defined by overall capability, integrity, attention to stakeholders and an overwhelming need to control operations. This deficiency of management then manifests itself in a deficiency in the planning process and thus in the plan. This is evidenced by the lack of proper estimation of cash flows, risk level and overall valuation of the firm. This deficiency in planning then causes a problem in the creditor perspective thus leading to an overall lower inclination to adopt PPIRP. In addition, the various interviews conducted with Bankers in Bengaluru Urban indicate that there are alternative solutions such as one time settlement (OTS) and insurance provided by Government which could act as substitutes to a PPIRP approach to solve problems related to Insolvency in MSME.

These findings provide valuable insights into the relationships between the latent variables, contributing to a better understanding of the underlying structure and dynamics of the model. The statistical significance of the coefficients suggests meaningful associations between the latent constructs, supporting the validity and utility of the proposed SEM. However, it is essential to assess the overall fit of the SEM model using additional fit indices and model diagnostics to ensure its adequacy and appropriateness for the research context.

4.1.1. Recommendation involving Modifications to Existing Processes

To improve the Indian Pre-Packaged Insolvency Resolution Process (PPIRP) based on the comparative study across countries, the following inputs can be considered:

1. **Evaluate the Effectiveness of PPIRP:** Conduct thorough research and analysis on the PPIRP's impact on business dynamics, economic growth, and investor confidence. Monitor the implementation of the process, gather empirical evidence, and make necessary adjustments to ensure its success.
2. **Address Stakeholder's Concerns:** Enhance transparency and clarity regarding asset ownership, especially crown jewel assets. Implement non-discriminatory provisions to avoid unfair treatment by government regulators. These measures will increase investor confidence and attract domestic and international investments.
3. **Strengthen Conflict of Interest Rules:** Adopt the Insolvency Code of Ethics followed by the UK to address conflicts of interest. Introduce penalty provisions, like section 184, to deter and penalize individuals involved in such conflicts.
4. **Continual Learning and Improvement:** Stay updated on international jurisprudence and global best practices in bankruptcy and insolvency resolution. Continuously evaluate and enhance the PPIRP based on evolving needs and emerging trends in the field.
5. **Incorporate Best Practices:** Learn from successful bankruptcy reforms in other countries, such as specialized bankruptcy courts, accelerated proceedings, and regulation of insolvency practitioners. Adapt these practices to suit the Indian context.

By implementing these suggestions, India can enhance its bankruptcy and insolvency resolution framework, attract investments, improve the Ease of Doing Business ranking, and promote economic prosperity.

4.1.2. The Existing IRP Role with reference to specific clauses in the IBC

In the Pre-Packaged Insolvency Resolution Process (PPIRP), the Interim Resolution Professional (IRP) plays a supervisory role rather than a managing one. Here are some key points about the empowerment level of the IRP in the PPIRP process:

1. **Supervisory Role:** The IRP's role is primarily supervisory, ensuring that the process is conducted transparently and fairly. They oversee the collation of claims, preparation of the information memorandum, and reporting of avoidance transactions. As per Sec 54F(2)(d))The resolution professional shall perform the following duties, namely: monitor management of the affairs of the corporate debtor
2. **Collaboration with Management:** The IRP works in tandem with the existing management of the corporate debtor (CD). The management continues to run the day-to-day operations while the IRP ensures compliance with the process.
3. **Limited Direct Control:** Unlike the Corporate Insolvency Resolution Process (CIRP), where the IRP takes over the management of the CD, in PPIRP, the IRP does not have direct control over the operations of the CD. As per Sec 54H. Management of affairs of corporate debtor. During the pre-packaged insolvency resolution process period,— (a) the management of the affairs of the corporate debtor shall continue to vest in the Board of Directors or the partners, as the case may be, of the corporate debtor, subject to such conditions as may be specified; (b) the Board of Directors or the partners, as the case may be, of the corporate debtor, shall make every endeavour to protect and preserve the value of the property of the corporate debtor, and manage its operations as a going concern; and (c) the promoters, members, personnel and partners, as the case may be, of the corporate debtor, shall exercise and discharge their contractual or statutory rights and obligations in relation to the corporate debtor, subject to the provisions of this Chapter and such other conditions and restrictions as may be prescribed.
4. **Support from Creditors:** The IRP requires the support of the creditors and the management of the CD to successfully navigate the PPIRP. This collaborative approach is essential for the resolution process to work effectively. As per Sec 54F(3)(e)The resolution professional shall exercise the following powers, namely; appoint accountants, legal or other professionals in such manner as may be specified

4.1.3. Specific Recommendations to make PPIRP more efficient

- a) **Consider making the valuation process “Blind”** which means that the Valuation experts have access to data, but do not know the name of the company being admitted into the PPIRP. The advantages of Blind valuation includes removal of any bias which the valuation expert can possibly have. Decision making would be objective on the basis of financial information available. Disadvantages could include lack of context available to valuation experts, Market position, Brand Valuation and industry specific risks could become unknown factors in the valuation. Another disadvantage of Blind valuations includes is that it might miss out on specific nuances and detailed insights that can only be obtained through a thorough understanding of the firm's operations, history, and market dynamics.

How Blind Valuation Could Work:

- i. **Anonymized Financial Data:** Provide balance sheets, income statements, and cash flow statements without company-specific identifiers.
- ii. **Market Comparables:** Supply industry benchmarks and market trends relevant to the firm's sector.
- iii. **Operational Metrics:** Include key performance indicators (KPIs) such as production volumes, sales growth, and cost efficiency metrics, without linking them to a specific company.
- iv. **Asset Information:** Details of assets, such as machinery, real estate, and intellectual property, can be listed without mentioning the firm's name

b) Make Valuations more acceptable to the Creditors by

- i. **Transparent Communication:** Ensure that all valuation methods and assumptions are clearly communicated to the creditors. This builds trust and helps them understand the basis of the valuation.
- ii. **Independent Valuation Experts:** Engage multiple independent valuation experts to provide unbiased assessments. This can help in presenting a more balanced view to the creditors.
- iii. **Detailed Information Memorandum:** Provide a comprehensive information memorandum that includes detailed financial data, market analysis, and future projections. This helps creditors make informed decisions.
- iv. **Creditor Involvement:** Involve creditors in the valuation process by seeking their input and feedback. This can help address their concerns and increase their acceptance of the valuation.
- v. **Regular Updates:** Keep creditors informed with regular updates on the progress of the valuation and resolution process. Transparency and timely communication can help build confidence among creditors.

- c) **Recruit turnaround experts including** Managers, Auditors, Forensic auditors, admin, retired beauraucrats, who report to IRP to perform day-to-day operations only during settlement period. These operations could give new direction to the CD and could include
- i. **Identification of Key Areas:** Determine the critical areas where turnaround expertise is needed, such as financial management, operations, marketing, or supply chain.
 - ii. **Engagement of Specialized Consultants:** Hire specialized turnaround consultants or interim management professionals with a proven track record in similar industries.
 - iii. **Collaborate with Existing Management:** Work closely with the existing management team to ensure a smooth transition and leverage their knowledge of the business.
 - iv. **Set Clear Objectives:** Define clear objectives and performance metrics for the turnaround experts to ensure accountability and measure progress.
 - v. **Regular Monitoring:** Establish a system for regular monitoring and reporting to assess the effectiveness of the turnaround efforts and make necessary adjustments.

d) Specific Legislative reforms which could help abet adoption of PPIRP

- i. **Simplified Approval Process:** Streamline the approval process for PPIRP applications to reduce bureaucratic hurdles and expedite the initiation of the process.
- ii. **Enhanced Creditor Incentives:** Provide incentives for creditors to participate in the PPIRP, such as tax benefits or priority claim status in the resolution plan.
- iii. **Clearer Guidelines for Turnaround Experts:** Establish clear guidelines for the recruitment and role of turnaround experts, ensuring they have the authority to make necessary operational changes.
- iv. **Increased Transparency:** Mandate regular updates and transparent communication throughout the PPIRP process to build trust and confidence among stakeholders.
- v. **Support for MSMEs:** Introduce specific provisions to support MSMEs, such as extended timelines and additional financial assistance, to help them navigate the PPIRP process more effectively
- vi. **Mandatory Disclosure of Valuation Methodology:** Require that the valuation experts disclose their methodology and assumptions in detail, ensuring transparency and allowing creditors to understand the basis of the valuation.
- vii. **Third-Party Review:** Introduce a requirement for a third-party review of the valuation report by an independent expert to validate the findings and provide an additional layer of credibility.
- viii. **Binding Arbitration:** Implement a binding arbitration process for disputes over valuations, where an independent arbitrator can make a final decision that creditors must accept.
- ix. **Creditor Input:** Mandate that creditors have the opportunity to provide input and feedback during the valuation process, ensuring their concerns are considered and addressed.
- x. **Penalties for Non-Compliance:** Establish penalties for creditors who unreasonably reject valuations without valid grounds, encouraging them to accept expert assessments more readily.

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Appendix

Questionnaire

Pre-Packaged Insolvency Resolution Plan (PPIRP) Under-Utilization Survey

Dear Respondent,

This survey is being conducted as part of a sponsored research project from Indian Institute of Insolvency Professional (IIPI) by the Ramaiah University of Applied Sciences (RUAS), Bangalore, in order to understand the reasons for the under-utilization of the Pre-Packaged Insolvency Resolution Plan (PPIRP) as proposed by the Indian Government . This plan is not showing large scale adoption among Micro, Medium and Small-Scale Enterprises (MSME) in India, and we are conducting a study as to why not.

The Respondents are a cross-section of Finance Professionals which include Chartered Accountants (CA), Insolvency Professionals (IP), Creditors (Including Bankers), MSME Owners (Debtors) as well as Industry Association Members and finally, Legal Professionals engaged in Insolvency Resolution Activities.

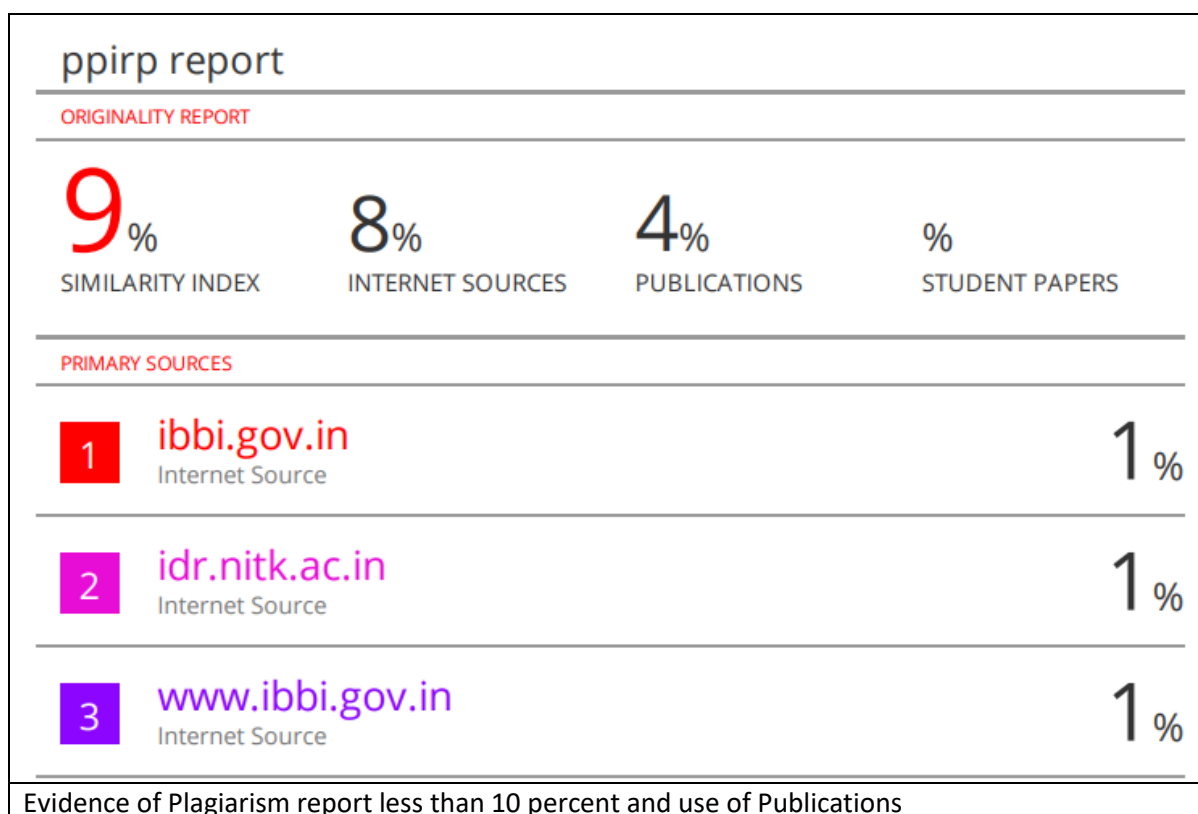
You are being requested to kindly give **your perspective** on each of the Answers. Most questions require the Respondent to look at the lack of adoption of PPIRP from various dimensions such as Creditor view, Debtor view and , Managerial view. Thanks in advance for your participation and we deeply appreciate your valuable time.

Dr. Uday K Jagannathan, Dr. K M Sharath Kumar and Mrs. Savitha Kulkarni

6. Appendix

Questionnaire for Bankers, Chartered Accountants, Insolvency Professionals and MSME Owners

Question	Q. No
number of years in Operation of your Company	Q1
Is your Company an Insolvent one? (For MSME only)	Q2
I am a/an	Q3
Size of MSME served	Q4
Area of Operations in India	Q5
Years of Professional Experience of the Respondent	Q6
Average Size of Loan taken by MSME	Q7
Respondent perceives that General level of Awareness of PPIRP among MSME ecosystem stakeholders is low	Q8
Respondent perceives PPIRP as new and unproven	Q9
Respondent perception that Legislative infrastructure for PPIRP is inadequate.	Q10
Respondent perception that PPIRP is an accelerated solution (time-constraint is an issue)	Q11
Respondent to Rank the Under-utilization of PPIRP by Root Causes as Listed Below [Time Constraint]	Q12
Respondent to Rank the Under-utilization of PPIRP by Root Causes as Listed Below [Valuation issue]	Q13
Respondent to Rank the Under-utilization of PPIRP by Root Causes as Listed Below [Transparency]	Q14
Respondent to Rank the Under-utilization of PPIRP by Root Causes as Listed Below [Owner Integrity]	Q15
Respondent to Rank the Under-utilization of PPIRP by Root Causes as Listed Below [Legislation issue]	Q16
Respondent perception on Creditor view of the Value of Fixed Assets of Insolvent Firm	Q17
Respondent perception on Creditor view of Estimation of Cash flows	Q18
Respondent perception on Creditor view in Estimation of firm risk level	Q19
Respondent perception on Creditor view of Relative valuation of firm (Valuation in comparison to peers)	Q20
Respondent perception on Creditor view in Degree of bias to Debtor in Firm Valuation	Q21
Respondent perception on Creditor view in Degree of inaccuracy of Firm Valuation using Intrinsic Methods	Q22
In summary, PPIRP framework is under-utilized because of Firm Valuation issues	Q23
Respondent perspective on Managerial capability to run the Insolvent firm	Q24
Respondent perspective on Management attention to stakeholders	Q25
Respondent perspective on integrity of existing Management	Q26
Respondent perspective on Managerial Ability to execute plan of Committee of Creditors	Q27
Respondent perspective on desire of existing Management to retain control of operations	Q28
Respondent perspective on CoC plans to address the needs equitably, for all creditors	Q29
Respondent perspective on CoC plans can be feasibly implemented with Firm Valuation constraints	Q30
Respondent perspective that CoC plans can be feasibly implemented with time constraints	Q31



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