

A Quantitative ABCD Analysis of Factors Driving Share Price Volatility in the Indian Pharmaceutical Sector

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ABSTRACT

Purpose: *This research employs an innovative ABCD (Advantages, Benefits, Constraints, and Disadvantages) analysis framework to intricately explore and evaluate the diverse factors influencing share price volatility in the Indian Pharmaceutical Sector. Delving into both individual and systemic characteristics, the study quantitatively assesses the effectiveness of various elements impacting share prices. Each component related to share price movements is meticulously assigned a score or weightage, providing a nuanced understanding of their respective contributions.*

Design: *The researcher utilized focused group interviews to collect participants' viewpoints on the factors influencing share price dynamics in the Indian pharmaceutical industry. Opinions were obtained through designated measurements, and the collected data underwent subsequent quantitative analysis.*

Findings: *In the specific context of the present study, which focuses on the quantitative ABCD analysis of factors driving share price fluctuations in the Indian pharma industry, the research findings underscore the notable impact of advantageous factors on volatility. The outcome of the ABCD analysis substantiates the effectiveness of the concepts/ideas related to Factors Driving Share Price Volatility in the Indian Pharmaceutical Sector.*

Originality: *This research introduces a novel application of the ABCD analytical paradigm to investigate factors influencing variations in the pricing dynamics of shares in the Indian pharmaceutical industry. While ABCD analysis is prevalent in diverse areas, this study pioneers a unique exploration within the pharmaceutical domain. By identifying and evaluating the crucial elements influencing share prices, this work contributes to the originality of studies in the field, presenting a distinctive approach to understanding the dynamics of the Indian pharmaceutical market.*

Type of Paper: *Empirical Analysis.*

Keywords: ABCD Framework, Factor Analysis, Elementary Analysis, Share Price Volatility, Indian Pharmaceutical Sector, Quantitative ABCD Analysis

1. INTRODUCTION :

In the kaleidoscopic realm of the Indian pharmaceutical industry, the passage of time has woven a tapestry of evolution, resilience, and transformation. Today, standing at the crossroads of unprecedented shifts, the Indian pharmaceutical sector reflects a story of adaptability and fortitude. Indian pharmaceutical engineering remains at the forefront among science-based industries, displaying broad expertise in the complex domains of drug production and technology (Kolte et al., 2022) [1]. Continued sectoral advancements propelled India to be recognized among the foremost healthcare markets worldwide by the close of 2020 (Festa et al., 2022) [2]. This sector, known for its resilience and adaptability, has witnessed remarkable transformations in recent years. Amid the challenges posed by COVID-19, the Indian pharmaceutical industry demonstrated remarkable resilience, successfully

navigating the complexities brought about by the pandemic. The sector not only sustained its operations but also played a crucial role in addressing the healthcare needs arising from the global health crisis. This included the rapid development and production of vaccines, medications, and other essential medical supplies, showcasing the industry's ability to adapt and contribute significantly to public health during unprecedented times.

In recent years, the pharmaceutical sector has contended with a myriad of formidable challenges and complexities, ranging from heightened regulatory scrutiny to the pursuit of innovation and the development of effective therapeutics and vaccines. These efforts have not only shaped the industry's response to current healthcare demands but have also significantly impacted the valuation and volatility of pharmaceutical stocks in the market. Indian pharmaceutical companies' share prices have undoubtedly been influenced by global health trends, regulatory changes, and shifts in the competitive landscape. Observers closely monitor how these companies navigate regulatory complexities, achieve research and development breakthroughs, respond to market conditions, and adapt to external influences. In the intricate landscape of the Indian pharmaceutical industry, where market intricacies and regulatory frameworks are closely entwined, share price fluctuations play a pivotal role as performance indicators. Our research aims to delve into the dynamics of share price movements within this sector, utilizing a quantitative ABCD analysis to unravel the various factors at play. Recognizing the crucial need for a profound understanding of the forces at play in the Indian pharmaceutical sector, our research strategically employs the ABCD framework—an effective method widely acclaimed across diverse sectors. In this analytical framework, we meticulously examine each facet—Advantages, Benefits, Constraints, and Disadvantages—as crucial lenses to dissect and quantify the numerous factors influencing share price fluctuations. Diverging from conventional methodologies, our study pioneers a focused exploration into the specific nuances of the Indian pharmaceutical sector. Through this exploration, we aim to make a meaningful contribution to the ongoing discourse surrounding the financial performance of the Indian pharmaceutical industry. The in-depth investigation's purpose is not just to improve our comprehension of the industry's dynamics but also to equip stakeholders with the knowledge and tools to navigate and succeed within this intricate framework.

2. EXISTING LITERATURE ON DIVERSE STRATEGIC MODELS AND THE STRATEGIC UTILITY OF ABCD ANALYSIS :

Several research studies in the realm of strategic management have paved the way for commencing the literature review segment. Strategic management employs a diverse set of strategies to effectively navigate challenges and mold the trajectory of an organization. Transitioning to a closer examination of specific strategies, it's imperative to highlight that strategic planning and decision-making are instrumental in organizational development and sustainability. In this segment, we will provide an overview of some key strategies before delving into a more in-depth discussion of the unique ABCD strategy. To begin with, The Ansoff Matrix-The Ansoff Matrix explores growth strategies, the Blue Ocean Strategy urges businesses to discover uncontested market spaces, and Scenario Planning anticipates and adapts to future uncertainties (Hussain et al., 2013; Aithal & Kumar, 2015) [3] [4]. The Balanced Scorecard method is a strategic management tool that goes beyond traditional financial metrics to assess corporate performance comprehensively incorporating goal-related measures from four key perspectives (Kaplan, 2009) [5]. Value Chain Analysis dissects activities contributing to competitive advantage, and the Technology Acceptance Model seeks to understand and predict how users accept and adopt new technologies (Ensign, 2001; Bagozzi, 2007) [6] [7]. Emphasizing internal resources, the Resource-Based View focuses on analyzing and leveraging an organization's internal resources and capabilities as sources of competitive advantage, while Game Theory analyzes strategic interactions (Mahoney & Pandian, 1992; Sharma & Bhattacharya, 2013) [8] [9]. The Kano Model categorizes customer preferences, the Diamond Model assesses national competitiveness, and Critical Success Factors pinpoint key areas for success (Xu et al., 2009; Chobanyan & Leigh, 2006; Sudhakar, 2012) [10]-[12]. Project management benefits from the RACI Matrix, clarifying responsibilities (O'Connor & Mock, 2020) [13]. Each model, including those previously mentioned, provides a distinctive lens for examining organizational strategy, competitive positioning, and decision-making processes. Building on the foundational understanding of various strategic analysis frameworks, we now shift our focus to the ABCD analysis. Unlike the previously mentioned models, the ABCD

framework takes a unique approach by systematically evaluating business models, strategies, operational concepts, and business systems through four essential constructs: Advantages, Benefits, Constraints, and Disadvantages (Aithal et al., 2016) [14]. Aithal (2016)'s [15] framework, encapsulating Advantages, Benefits, Constraints, and Disadvantages, emerged as a structured and effective matrix for evaluating determinant issues and key attributes. The framework's simplicity and efficacy provided valuable guidelines for analyzing the effectiveness of diverse business models or operational concepts. When implemented, this methodology leads to a meticulously organized list outlining the aspects, advantages, benefits, limitations, and drawbacks pertaining to determining issues. It systematically explores diverse essential attributes linked to these determining issues, exerting an influence on the business or concept. Furthermore, it unveils the crucial component elements embedded within each determining issue, enriching understanding in the evaluation process. This framework stands out for its structured and quantifiable method, providing a holistic perspective that combines internal and external factors in strategic evaluation. Comparatively, in contrast to established techniques like SWOC, Competitive Profile Matrix (CPM) analysis, EFE & IFE Matrices, BCG analysis, Porter's Five Forces Model, and PESTLE Analysis, the ABCD framework brings its own strengths to the forefront that includes holistic perspective, adaptability, strategic integration, dynamic nature, focus on critical domains, action-oriented insights, and innovative approach. The effectiveness of the ABCD analysis framework as a strategic tool for business models has been extensively explored in the existing literature. The researchers have conducted a comprehensive examination of various applications across different industries, shedding light on the versatility of this analytical method. The quantitative evolution of the ABCD analysis is evident through many recent studies.

Building upon the synthesized insights from the literature review, the present study delves into an in-depth examination and evaluation of the factors influencing share price volatility within the Indian Pharmaceutical Sector. Employing the ABCD analysis framework as a structured analytical tool, the investigation meticulously assesses the impact of various determinants on share price dynamics. The positive aspects, gains, limitations, and drawbacks are methodically recognized and evaluated across critical domains such as Pharmaceutical Industry Dynamics, stakeholders' Influence, Financial Performance, External Economic Factors, Research and Development Impact, and Global Health Events. This analytical framework aids in pinpointing determinant issues and critical attributes, with the study utilizing the focus group method to discern and elaborate on key elements associated with each factor.

3. OBJECTIVES OF THE STUDY :

This research endeavours to achieve the following objectives:

- Investigate and discuss the appropriateness of employing the ABCD analysis framework for a comprehensive analysis of factors influencing share price volatility in the Indian pharmaceutical industry.
- Methodically enumerate and evaluate the Advantages, Benefits, Constraints, and Disadvantages linked to comprehending the factors affecting share price volatility within the Indian pharmaceutical sector.
- Identify key determinant issues influencing determinants of share price volatility within the Indian pharmaceutical industry.
- Use the ABCD framework to analyze affecting features under each key attribute, providing insights into their quantitative impact on factors driving share price volatility.
- Utilize the elementary analysis technique to identify and analyze critical constituent elements associated with each ABCD construct.
- Conduct a concise evaluation of the significance of critical constituent elements within each ABCD construct, quantifying their impact on share price volatility influencers.

4. ABCD LISTING FOR QUANTITATIVE ANALYSIS OF FACTORS DRIVING SHARE PRICE VOLATILITY IN THE INDIAN PHARMACEUTICAL SECTOR :

4.1 Review of existing literature on ABCD listing:

Numerous studies showcased the suitability of the ABCD analysis in identifying critical elements within business models, strategies, and concepts. As we focus on the ABCD framework, it's noteworthy to

highlight its versatile application across various domains and a wide range of scenarios. The ABCD analysis framework effectively identified key influencing variables and essential aspects for customers' inclinations to minimize food wastage in dining establishments, supporting the effectiveness of food waste mitigation efforts (Salins & Aithal, 2022) [16]. Further, through the ABCD framework nanotechnology as green technology was analyzed to determine its importance in solving both in addressing fundamental and sophisticated societal challenges (Aithal & Aithal, 2018) [17]. Utilizing the ABCD analysis frameworks factors that encourage rural youth to engage in online shopping were studied (Fernandes & Shailashree, 2023) [18]. In addition, the ABCD model was applied to pinpoint the essential elements and factors influencing the effectiveness of stress-coping mechanisms (Kumari & Aithal, 2022) [19]. Building upon the comprehensive review of existing literature on ABCD mentioned above, Table 1 displays an expanded overview of the range of ideas where ABCD listing has been implemented, showcasing its respective focal points and contributions.

Table 1: Assessment of Academic Publications Regarding the ABCD Listing in Various Domains

S. No.	Focus	Contribution	References
1	Evaluation of stage model in higher education	This study examined the efficacy of the stage model using the ABCD framework, demonstrating the logical application of the ABCD technique for evaluating educational system performance. The study provides insights into structured approaches for assessing and improving educational programs.	Aithal et al., (2016) . [20]
2	Examination of National Institutional Ranking Framework (NIRF)	The study explores the National Institutional Ranking Framework (NIRF) concerning its role in improving the status of higher education institutions in India. Utilizing the ABCD technique, the study evaluates the framework's efficacy in addressing critical elements such as research output, learning environment, infrastructure, inclusivity, and overall student development, offering a comprehensive analysis for the literature review.	Aithal et al., (2016). [21]
3	Remote office administration, facilitated by online platforms, in the future of the education system	This study advocates for the integration of an online office management system to support the transition to a global online education model in higher education. The proposed system, managed remotely by a team of online office managers, mirrors traditional administrative functions, including marketing, admissions, online materials management, and more. The emphasis lies in investigating the consequences of an at-home work model in developing nations such as India, highlighting its benefits for students, workers, and service providers, along with the corresponding advantages for diverse stakeholders and the broader society. The paper also acknowledges constraints for employees and employers, highlighting potential disadvantages for stakeholders, while noting that the model can reduce travel and office-related expenses.	Reshma et al., (2015). [22]
4	Dye-doped Polymers for Photonic Applications	This paper explores the integration of scientific and social research in photonics, focusing on the characteristics of dye-doped polymer films for various applications. Utilizing the ABCD	Aithal & Aithal, (2016). [23]

		framework, the study systematically analyzes determinant issues related to material, application, commercialization, production/service providers, customer, and environmental/social aspects. The analysis identifies 204 critical constituent elements under the constructs of advantages, benefits, constraints, and disadvantages, providing a comprehensive understanding of the potential success and challenges in utilizing dye-doped polymer films for photonics applications.	
5	Annual research productivity assessment using the ABC Model	This study underscores the importance of higher education institutions not only as centers of learning but also as generators of new knowledge through faculty research. It introduces the ABC model, which focuses on measuring annual research performance. The study applies the ABCD analysis technique to the ABC model, emphasizing a systematic examination of key factors, such as the number of articles, books, and book chapters published, to identify effective elements in assessing the annual research productivity of higher education institutions.	Aithal et al., (2016). [24]
6	On-line campus placement model	This study utilizes the ABCD analysis framework to evaluate the feasibility and global applicability of online campus placement models for a range of stakeholders. The research identifies 158 crucial components, scrutinizing the strengths, advantages, limitations, and drawbacks, providing perspectives on the efficiency of online campus placements for recruiters, students, parents, and institutions.	Shenoy & Aithal, (2016). [25]
7	Assessing Theory A on organizational performance	This paper explores Theory A, which challenges established notions of human behaviour and motivation in organizational performance. Grounded in the evolving mindset of modern employees influenced by technological changes and shifting societal expectations, Theory A emphasizes creativity as a driving force for positive contributions. Utilizing the ABCD analysis framework, the study conducts a comprehensive factor and elemental analysis, focusing on the favourable elements, advantages, limitations, and disadvantages, with essential constituent elements playing a pivotal role in the success of these aspects within the framework of Theory A.	Aithal & Kumar, (2016). [26]
8	Applicability of ABCD analysis as a research methodology in corporate case studies	This paper delves into the importance of utilizing company analysis as a case study research method in the field of management, highlighting its effectiveness in addressing and resolving organizational challenges. Highlighting the incorporation of the ABCD Analysis framework into corporate case analysis procedures, the conversation centers on its effectiveness in	Aithal, (2017). [27]

		examining various determinant issues, identifying influential factors, and identifying crucial elements for each construct. The paper serves as a guide for emerging researchers, offering insights into the development and analysis of company case studies through the adoption of the ABCD framework.	
9	Factor analysis of research indices	This research delves into the utilization of research indices as instruments for evaluating the quality and influence of research contributions in specific fields or subjects. It explores commonly used indices such as the H-index and i10-index, concentrating on the methods of calculation based on citation values or the number of published papers. Furthermore, the study introduces innovative indices like ARP-Index, RC-Index, RE-Index, Project Productivity Index, and Cost Index, examining the factors that influence these indices. The analysis takes into account the research organization, researcher, funding agency, and industry, assessing the strengths, benefits, limitations, and drawbacks associated with each index.	Aithal & Aithal, (2017). [28]
10	IEDRA model for placement purpose	This paper seeks to examine the real-world feasibility, practical utility, resourcefulness, and applicability of the IEDRA Model. It employs the ABCD analysis framework to formulate theories or hypotheses regarding the universal relevance of the IEDRA framework for the stakeholders involved.	Shenoy & Aithal, (2017). [29]
11	Fingerprint biometric attendance maintenance system	This study investigates the progress in Information and Communication Technology that has enabled the adoption of technology-supported attendance systems in higher education, particularly emphasizing fingerprint biometrics. The research delves into the pros, advantages, limitations, and drawbacks of the fingerprint-based attendance system, utilizing focus group interactions to gain insights. Furthermore, the paper puts forth suggestions for additional research in the field, making valuable contributions to studies on fingerprint biometric attendance in higher education.	Krishna Prasad, (2018). [30]
12	Innovative approach for e-campus interview strategy	The study centers on the recruitment procedures of Berger Paints India at the Srinivas Institute of Management Studies, specifically highlighting the incorporation of an electronic online approach within the MBA program. The analysis seeks to understand the importance of the recruitment process for students, stakeholders, the online recruitment sector, and the broader industry context.	Shenoy et al., (2018). [31]
13	Inclusivity of patent analysis in research method	The paper presents a new qualitative research methodology called Patent Analysis, focusing on the systematic examination, description, and	Aithal & Aithal, (2018). [32]

		interpretation of selected patents across diverse domains. The objective of this method is to contribute to the generation of novel concepts or theories by assessing patents in terms of their advantages, benefits, limitations, drawbacks, effectiveness, and potential future value. Furthermore, the paper investigates how patent analysis can be applied to guide strategic decisions within organizations and predict the emergence of new technologies.	
14	Applicability of ABCD for multifactor authentication model	The research utilizes ABCD analysis to investigate pivotal issues associated with Multifactor Authentication. These encompass concerns related to security, user-friendliness, input, process, customer, service provider, and performance evaluation matrix issues. The analysis identifies crucial elements within the categories of advantages, benefits, constraints, and disadvantages, confirming the efficacy of this multifactor authentication model.	Aithal, (2018). [33]
15	Challenges in higher education within the national education policy	The research scrutinizes the recent discussions surrounding Indian Higher Education Policies, with a specific focus on the consequences, notable characteristics, and objectives outlined in the draft of the National Education Policy (NEP) 2019. Employing content analysis, the review investigates various policies articulated in the draft, particularly within the higher education sector, drawing comparisons with earlier policies. The assessment also gauges the potential effects of NEP 2019 on both private and public Higher Education Institutions (HEIs), considering aspects such as facilities and restrictions. The strengths and weaknesses of the proposed policy are delineated, and recommendations are put forth for the effective implementation and overall improvement of the country's education system.	Aithal & Aithal, (2019). [34]
16	Buying intentions for organic food items	This empirical investigation employs the ABCD analysis framework to evaluate the efficacy of organic food products and their influence on purchase intentions. By scrutinizing empirical data, the study discerns 98 essential constituent elements distributed across different constructs. The results underscore a notable level of satisfaction, where benefits attain the highest score, trailed by advantages and disadvantages with a neutral weighting, and constraints exhibiting less than satisfactory levels. This paper enriches the extant literature by employing the ABCD framework to delve into pivotal elements shaping consumer perceptions and purchase inclinations regarding organic food products.	Sujaya & Aithal, (2022). [35]
17	The influence of social media on online purchase	This research aims to assess the suitability of the ABCD analysis framework in exploring the impact of social media on online purchasing	Madhura & Panakaje, (2023). [36]

	attitudes toward fashion products	behaviour for fashion products. The study employs systematic literature reviews on social media effects and ABCD listing, utilizing a quantitative approach with focus group methods. Findings reveal that the ABCD technique offers a comprehensive approach to analyzing business models, emphasizing the significance of advantages in influencing customers to shop online for fashion products. The study's originality lies in its focus on the interplay between social media influence and online buying behaviour within the ABCD framework, providing valuable insights for future research in this domain.	
18	Entrepreneurship education	This paper addresses the challenge of integrating Entrepreneurial Innovation into current pedagogical approaches for Entrepreneurship Education. Through empirical studies with 250 MBA students, the study emphasizes the necessity of infusing practical applications into entrepreneurial training, particularly through group-based activities and case studies. The research highlights group projects as a notable emerging pedagogical innovation in entrepreneurial education, providing valuable insights for enhancing the preparation of students for dynamic entrepreneurial environments.	Lonappan & Aithal, (2023). [37]
19	Consumer confidence in Ayurvedic products	The study aims to identify factors influencing consumer trust in Ayurvedic products, utilizing the ABCD model to assess its advantages, benefits, challenges, and disadvantages. Through a comprehensive review of the ABCD analytical framework literature, the research successfully identifies key factors and essential characteristics influencing customer trust in ayurvedic products. Quantitative analysis, including focus group interactions and appropriate attribute weighting, reveals a growing trend of adopting sustainable strategies. The application of the ABCD model receives strong endorsement for its beneficial elements, affirming its effectiveness in fostering trust in ayurvedic product consumption.	Mahale, (2023). [38]
20	Execution of corporate social responsibility initiatives	The primary objective of this research was to pinpoint the key factors affecting the execution of corporate responsibility initiatives through the application of the ABCD analysis framework. Through focused group interviews and quantitative analysis, the research revealed that challenges in establishing these initiatives had more advantages and benefits than disadvantages, emphasizing their effectiveness. The paper not only enhances understanding of factors impacting corporate responsibility but also suggests the development of measurement scales for future studies, providing valuable insights for	Bindhu & Shailashri, (2023). [39]

		academics, researchers, and HR policymakers seeking to boost employee productivity.	
21	Fostering corporate sustainability through disclosures in education"	The paper focuses on evaluating the efficacy of the ABCD analysis method in comprehensively analyzing corporate sustainability disclosures within the context of education. Furthermore, the research has utilized factor analysis and elementary analysis to delve more profoundly into this realm, providing insightful contributions to the current body of literature concerning sustainability reporting and educational practices.	Nayak & Kayarkatte, (2022). [40]
22	Agricultural stakeholders	This research investigates the roles of stakeholders in the modern agriculture program's use of agricultural machinery to better serve farmers. Using the ABCD analysis method, it explores the involvement, influence, interests, and relationships of various parties involved in contemporary agricultural programs. The study's findings highlight the applicability of the ABCD technique for all agricultural stakeholders, revealing significant insights through quantitative analysis and focus group engagement.	Kambali et al., (2023). [41]
23	Green banking practices and products	The investigation utilized the ABCD analysis framework to appraise the feasibility of a concept or idea, with a particular emphasis on individual characteristics, system attributes, and the overall efficacy of the proposed plan or concept. Additionally, the study delves into the identification of constitutionally relevant traits in the analysis.	Prabhu & Aithal, (2023). [42]
24	The business strategy employed by millennials for engaging customers online.	Investigated the strategic business model of millennials' online customer engagement using the ABCD analysis framework. The focus is on identifying key factors influencing the proposed model by assessing its Advantages, Benefits, Constraints, and Disadvantages constructs. By employing an integrated qualitative and quantitative methodology, the study seeks to identify the most impactful elements within each of these four constructs of the model.	Raghavan & Pai, (2023). [43]
25	Assessment of local media's engagement with the youth audience	This study explores the engagement of the youth audience in local media using the ABCD analysis framework to identify key factors impacting the proposed model. Utilizing a combination of qualitative and quantitative methods, data was gathered through focus group discussions and pre-designed response sheets. The results highlight that the advantage and benefit components exert a more positive influence on the youth audience and local media in comparison to constraints and disadvantages. Notably, the study contributes to originality by extensively employing the ABCD analysis framework as a tool for business model analysis, incorporating insights from previous research using the same	Lobo & Bhat, (2023). [44]

		framework, and suggesting novel research directions for youth audiences and local media.	
26	Consumer perspectives on home furniture purchases	The study has made a comprehensive understanding of the development of the ABCD framework for examining in-store transactions and consumer perspectives on home furnishings. From a stakeholder perspective, the research facilitates the identification, evaluation, and comprehension of crucial factors, concerns, and significant attributes influencing elements such as advantages, benefits, constraints, and consequences of disadvantages. Additionally, the study aims to pinpoint the key determinants influencing all in-store purchases of home furnishings products.	Amin & Kumar, (2023). [45]
27	Viability of engaging in business within the base of the pyramid market	This research focuses on the quantitative analysis of the ABCD framework within the Base of the Pyramid (BoP) market context. It assesses stakeholders' perceptions regarding its attractiveness, feasibility, profitability, and potential for sustainable business generation. Utilizing a systematic literature review and a quantitative approach involving the focus group method, the research identifies essential constituent elements and their attributes within the ABCD framework. The study demonstrates the framework's effectiveness in formulating a viable business model for successful penetration of the BoP segment.	Raj & Aithal, (2022). [46]
28	Private university operations	Utilizing the analytical lens of the ABCD approach, scholars in this study have delved into a comprehensive exploration. Within the spectrum of six pivotal variables, the operational dynamics of a university emerge prominently. These variables encapsulate challenges spanning governance, leadership, innovation, and best practices. Moreover, the research explores aspects related to the organizational facets, student advancement, faculty growth, communal and past stakeholder considerations, and issues surrounding various challenges.	Muduli et al., (2019). [47]
29	Online food delivery facilities	The study has traced the evolution of the ABCD framework applied to the analysis of online food delivery services. It has uncovered and assessed the key issues and attributes influencing advantages, benefits, constraints, and disadvantages.	Frederick & Bhat, (2022). [48]
30	Six thinking hat	The ABCD analysis framework is applied to evaluate the Six Thinking Hat techniques, encompassing an examination of organizational barriers, conceptual uncertainties, operational issues, managerial challenges, and concerns related to society and stakeholders.	Aithal et al., (2016). [49]

31	Generating value via corporate social responsibility	The objective of this research was to examine the ABCD analytical frameworks concerning Corporate Social Responsibility (CSR) to identify crucial constituent elements and factors influencing value creation through CSR. The quantitative analysis within the ABCD framework revealed a significant emphasis on favourable variables in the context of value generation through CSR, with benefit factors closely trailing. The results suggest that CSR offers more advantages and benefits than limitations and drawbacks, highlighting its effectiveness in value creation.	Dsouza & K. V. M. Varambally, (2023). [50]
32	Significance of ancient Indian education in contemporary educational systems.	This study examines the rich educational traditions of ancient India, emphasizing contributions like the decimal system and Vedic teachings. It draws parallels between ancient and modern education, highlighting the continuity of practices such as yogic techniques and memory enhancement methods. Utilizing the ABCD approach, the study thoroughly examines the strengths, merits, limitations, and drawbacks of the current education system, considering viewpoints from both students and educators.	Mishra & Aithal, (2023). [51]
33	Optimizing resources through the circular economy	The study utilizes systematic review, SWOC, and ABCD analyses to underscore the importance of the circular economy for resource optimization, offering valuable insights into its significance and opportunities in various industries.	Aithal & Aithal, (2023). [52]
34	Performance metrics for researchers at various levels and approaches for attainment.	The study emphasizes the critical role of Key Performance Indicators (KPIs) for academic researchers at different career stages, from Ph.D. to post-doctorate levels, and for research supervisors. Using an exploratory research method, the study identifies and analyzes numerous KPIs, employing the ABCD analysis framework. The results underscore the structured guidance offered by these Key Performance Indicators (KPIs) to improve research output, influence, and cooperative efforts, thus influencing the career paths of academic researchers.	Aithal & Aithal, (2023). [53]
35	Employability prediction model for management students	This article tackles the increasing need for management education and its implications for evaluating students' employability. Through an examination of employability models in the literature, especially those incorporating machine learning, the research seeks to construct a predictive model for employability. Applying ABCD analysis, the results underscore the critical requirement for a precise model to assist both students and faculty. Moreover, the research highlights shortcomings in existing models that evaluate the uncertainty associated with assessing	Crasta & Shailashri, (2023). [54]

		the quality of outcomes from educational institutions in the management domain.	
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4.2 ABCD Analysis of Factors Influencing Share Price Volatility in the Indian Pharmaceutical Sector:

Advantages:

Advantages associated with understanding the factors influencing share price volatility in the Indian pharmaceutical industry:

- **Informed Decision-Making:** Knowledge of influencing factors empowers stakeholders to make well-informed decisions regarding investments and strategic moves.
- **Risk Mitigation:** Understanding the factors contributing to share price volatility allows for better risk assessment and mitigation strategies.
- **Strategic Planning:** Insights into these factors enable the formulation of strategic plans to capitalize on opportunities and navigate challenges in the market.
- **Investor Confidence:** A transparent understanding of share price drivers enhances investor confidence, attracting and retaining stakeholders.
- **Market Competitiveness:** Awareness of influencing factors helps pharmaceutical companies stay competitive by adapting to market dynamics effectively.
- **Resource Allocation:** Efficient allocation of resources based on a comprehensive analysis of share price determinants ensures optimal financial management.
- **Regulatory Compliance:** Knowledge of factors influencing share prices helps companies stay compliant with regulatory changes, reducing legal and financial risks.
- **Stakeholder Communication:** Clear communication with investors, analysts, and other stakeholders is facilitated when armed with insights into share price volatility drivers.
- **Operational Efficiency:** Companies can streamline operations by addressing key factors affecting share prices, leading to improved overall efficiency.
- **Market Positioning:** Understanding share price dynamics assists in positioning pharmaceutical companies strategically within the market.
- **Anticipation of Trends:** Awareness of influencing factors enables companies to anticipate market trends and stay ahead of industry shifts.
- **Long-Term Planning:** Companies can develop robust long-term plans by considering the persistent and evolving factors affecting share prices.
- **Financial Performance Analysis:** Factors influencing share prices provide valuable inputs for assessing financial performance and planning for future growth.
- **Investment Attraction:** Transparent insights into share price determinants make pharmaceutical companies more attractive to potential investors.
- **Dynamic Adaptation:** With a deep understanding of factors influencing share prices, companies can adapt dynamically to changing market conditions.
- **Enhanced Credibility:** Accurate analysis and communication of share price determinants enhance the credibility of pharmaceutical companies in the financial market.
- **Effective Communication:** Companies can communicate their financial health more effectively to shareholders, fostering trust and credibility.
- **Strategic Alliances:** Knowledge of share price drivers facilitates the formation of strategic alliances and collaborations within the pharmaceutical industry.
- **Performance Benchmarking:** Companies can benchmark their performance against industry standards by considering factors influencing share prices.
- **Valuation:** Understanding these factors contributes to more accurate company valuations, aiding potential investors and stakeholders in decision-making.

Benefits:

Benefits associated with understanding the factors influencing share price volatility in the Indian pharmaceutical industry:

- **Improved Investment Returns:** A nuanced understanding of share price determinants enables investors to make informed decisions, potentially leading to improved investment returns.

- Risk Diversification: Knowledge of factors influencing share prices allows investors to diversify their portfolios effectively, managing risk exposure in the pharmaceutical sector.
- Strategic Investment Planning: Investors can strategically plan their investments based on a comprehensive analysis of share price drivers, optimizing their overall investment strategy.
- Timely Decision-Making: Access to insights on share price volatility factors facilitates timely decision-making for investors looking to capitalize on market opportunities or mitigate risks promptly.
- Enhanced Portfolio Management: Investors can manage their portfolios more effectively by aligning their investment strategies with the factors affecting share prices in the pharmaceutical industry.
- Economic Exposure: Understanding share price determinants allows investors to gauge their economic exposure to the pharmaceutical sector, making well-informed decisions about their financial positions.
- Long-Term Wealth Creation: Informed investment decisions based on a deep understanding of share price dynamics contribute to long-term wealth creation for investors.
- Increased Investor Confidence: Transparent communication about the factors influencing share prices enhances investor confidence, attracting more investment into the pharmaceutical industry.
- Alignment with Financial Goals: Investors can align their financial goals and objectives with the market dynamics, optimizing their investment strategies for both short-term gains and long-term growth.
- Opportunistic Investing: Knowledge of share price determinants enables investors to identify and seize opportunistic investment moments in the ever-changing pharmaceutical market.
- Strategic Asset Allocation: Investors can strategically allocate their assets by considering the influencing factors, ensuring a balanced and diversified investment portfolio.
- Market Timing: A clear understanding of share price determinants aids investors in effective market timing, maximizing their returns while minimizing risks.
- Active Portfolio Adjustments: Investors can make active adjustments to their portfolios based on changes in the factors influencing share prices, adapting to evolving market conditions.
- Optimized Risk-Reward Ratio: Investors can optimize their risk-reward ratio by making calculated investment decisions informed by a comprehensive analysis of share price drivers.
- Adaptability to Market Trends: Investors can adapt their investment strategies to align with emerging market trends and dynamics, staying ahead of shifts in the pharmaceutical sector.
- Mitigation of Financial Losses: Awareness of share price determinants enables investors to mitigate potential financial losses by making well-informed and timely adjustments to their investment portfolios.
- Enhanced Due Diligence: Investors can conduct more thorough due diligence by considering the factors influencing share prices, ensuring a more informed approach to investment decisions.
- Competitive Investment Edge: Investors who understand the factors affecting share prices gain a competitive edge, making strategic investment decisions that set them apart in the financial market.
- Valuation Assessment: Investors can more accurately assess the valuation of pharmaceutical companies, making investment decisions based on a clearer understanding of market value.
- Optimized Returns: Ultimately, understanding the factors influencing share prices in the pharmaceutical industry allows investors to optimize their returns by making well-calculated and strategic investment choices.

Constraints:

List of constraints associated with understanding the factors influencing share price volatility in the Indian pharmaceutical industry:

- Market Uncertainty: Share prices are influenced by unpredictable factors, introducing market uncertainty.

- Regulatory Risks: Stringent and evolving regulations pose challenges for predicting share price movements.
- External Economic Factors: Economic downturns, inflation, and external economic factors impact share prices beyond control.
- Research and Development Risks: Share prices are tied to the success or failure of research and development efforts, exposing investors to inherent risks.
- Competitive Landscape: Intense competition within the industry can lead to sudden market shifts, and challenging prediction and response.

Disadvantages:

List of disadvantages associated with understanding the factors influencing share price volatility in the Indian pharmaceutical industry:

- Global Supply Chain Risks: Disruptions in the global supply chain impact production and distribution, affecting share prices.
- Clinical Trial Outcomes: Sensitivity of share prices to unexpected outcomes of clinical trials introduces uncertainty.
- Intellectual Property Risks: Risks associated with patent expirations or legal challenges can adversely affect share prices.
- Currency Fluctuations: Global operations expose stakeholders to currency fluctuations, impacting financial results and share prices.
- Public Perception and Image: Negative public perception or controversies can lead to reputational damage, impacting share prices.
- Product Liability Issues: Unexpected product liability issues, such as recalls or adverse effects, can impact share prices negatively.
- Healthcare Policy Changes: Shifts in healthcare policies or government interventions introduce uncertainties, impacting share prices.
- Dependency on Key Personnel: Share prices are influenced by the departure or absence of key personnel, introducing risk associated with leadership changes.
- Market Sentiment: Share prices are heavily influenced by market sentiment, rumors, or speculative trading, leading to short-term fluctuations.
- Macro-Economic Factors: Broader macro-economic trends, such as interest rate changes or geopolitical events, can introduce volatility.
- Lack of Information Transparency: Limited transparency in financial reporting or insufficient information disclosure poses challenges for investors.
- Technological Disruptions: Rapid technological advancements or disruptions can impact the market landscape, influencing share prices.
- Supply and Demand Dynamics: Fluctuations in demand or disruptions in the supply chain introduce uncertainties, affecting share prices.
- Market Speculation: Excessive speculation in the stock market can lead to short-term price volatility.

Investigating the appropriateness of employing the ABCD analysis framework for a comprehensive analysis of factors influencing share price volatility in the Indian pharmaceutical industry reveals a clear alignment between the framework's structured approach and the study's objectives. The extensive advantages underscore ABCD's suitability, providing a systematic and informed platform for decision-making, risk mitigation, and strategic planning. Additionally, the framework addresses challenges, such as potential biases and constraints, ensuring a transparent and rigorous analysis. ABCD's capacity for dynamic adaptation, efficient resource allocation, and anticipation of trends resonates with the industry's complex dynamics, making it an apt choice for unraveling the nuanced factors impacting share prices. The outlined benefits, constraints, and disadvantages further emphasize that ABCD is not only suitable but integral for yielding valuable insights into the volatile landscape of the Indian pharmaceutical sector.

5. LITERATURE SURVEY OF FACTOR AND ELEMENTARY ANALYSIS USING ABCD FRAMEWORK :

To advance our exploration of factor and elementary analysis within the ABCD framework, reference has been made to pertinent scholarly publications. Table 2 displays the determinant issues identified through the ABCD framework in academic publications about diverse subject areas.

Table 2: Review of Scholarly Publications of ABCD Analysis Related to Various Domains and their Determinant Issues

S.No.	Focus	Determinant Issues	References
1	The idea of optimal software and scenarios for its actualization	Operational, transitional, maintenance, output, environment	Aithal & Pai T, (2016). [55]
2	Task Shifting: An optimal alternative for addressing shortages in professional healthcare personnel	Organizational, alternative acceptors, donor physicians, patients & relative, societal, country	Aithal & Aithal, (2017). [56]
3	Attraction and propulsion strategies of female entrepreneurs in the food processing industry	Organizational, business, customer, operational, and social, stakeholders	D’Silva & Ganesha, (2023). [57]
4	Aligning corporate social responsibilities with green banking practices: evaluating customer attraction and retention perspectives in selected Indian banks	Customer, organizational, board of directors, society, government, CSR	Prabhu & Aithal, (2023). [58]
5	Promoting Emotional Intelligence Among College Educators	Poor Person Organization, work-life imbalance, Clerical and administrative tasks, work disengagement	Santhumayor, (2023). [59]

6. KEY ATTRIBUTES AFFECTING SHARE PRICE VOLATILITY IN THE INDIAN PHARMACEUTICAL SECTOR :

The critical factors impacting share price volatility within the Indian Pharma Industry are thoroughly explored and analyzed by identifying key attributes associated with each determinant issue. These attributes serve as essential characteristics for discerning the influencing factors within each construct. Table 3 provides an overview of determinant issues and their significant key attributes in the context of factors driving share price volatility in the Indian Pharma Industry.

Table 3: Determinant Issues and Key Attributes of Factors Influencing Share Price Volatility Analysis within the Indian Pharma Industry

S. No.	Determinant Issues	Key Attributes
1	Pharmaceutical Industry Issues	Market Trends, Regulatory & Policy Changes, Competitive Landscape
2	Stakeholder Issues	Investor Sentiment, Institutional Holdings, Analyst Recommendations
3	Financial Performance Issues	Revenue Growth, Profit Margins, Debt Levels
4	External Economic Issues	GDP Trends, Interest Rates, Currency Exchange Rates

5	Research and Development Issues	Pipeline Success, Patent Expirations, Innovation Trends
6	Global Health Event Issues	Pandemics, Epidemics, Healthcare Policy Changes

This investigation centers on a systematic ABCD analysis aimed at exploring the factors influencing share price volatility within the Indian pharmaceutical sector. It is crucial to acknowledge that aside from the factors examined in this study, numerous other variables could potentially exert an impact on stock prices. These factors include supply chain resilience, product portfolio diversity, technological innovation, social responsibility, government policies, mergers and acquisitions, legal compliance, market perception, customer satisfaction, brand reputation, and political stability. While recognizing their relevance, these factors have been excluded from the current analysis due to the need for a targeted and in-depth examination of specific attributes that can be effectively captured within the structured framework of ABCD analysis. The ABCD method inherently requires a focused approach to systematically evaluate and quantify key aspects, and including an exhaustive list of variables may dilute the precision and depth of the analysis. Additionally, data limitations and the need for a manageable scope play a significant part in the selection of factors for the ABCD analysis. Future studies with a broader scope may delve into the influence of these excluded factors for a more holistic understanding of the intricate dynamics surrounding share price fluctuations in the Indian pharmaceutical sector.

7. FACTOR ANALYSIS OF FORCES DRIVING SHARE PRICE VOLATILITY IN THE INDIAN PHARMACEUTICAL SECTOR USING ABCD FRAMEWORK :

Analyzing the determinants of the pivotal attributes associated with the dynamics of share price volatility in the Indian Pharmaceutical Industry involves discerning the Advantages, Benefits, Constraints, and Disadvantages within the ABCD framework. Table 4 exemplifies a factor analysis within the ABCD framework, elucidating the exploration of factors influencing share price fluctuations in the Indian Pharmaceutical Industry.

Table 4: Factors Affecting Key Attributes Under the ABCD Framework

Determinant Issues	Key Attributes	Advantages	Benefits	Constraints	Disadvantages
Pharmaceutical Industry Issues	Market Trends	Informed decision-making based on trends	Strategic planning opportunities	Imitation by competitors	Limited market growth due to trend uncertainties
	Regulatory & Policy Changes	Adaptability to regulatory shifts	Compliance with industry standards	Operational disruptions due to sudden changes	Regulatory hurdles impacting business operation
	Competitive Landscape	Awareness of industry competition	Strategic positioning in the market	Increased competition leads to price wars	Market share erosion and reduced profitability
Stakeholder Issues	Investor Sentiment	Attraction of investment with positive sentiment	Increased liquidity and value of shares	Volatility in sentiment affecting investments	Negative sentiment leading to stock devaluation
	Institutional Holdings	Stability in ownership structure	Long-term commitment from institutional investors	Restrictions on decision-making due to	Potential conflicts of interest among stakeholders

				ownership structure	
	Analyst Recommendations	Increased investor confidence	Positive impact on share prices	Overreliance on analyst opinions	Unreliable or biased analyst recommendations
Financial Performance Issues	Revenue Growth	Indicates business health and potential	Attracts investors and stakeholders	Dependent on market conditions	Revenue decline may lead to financial instability
	Profit Margins	Reflects efficiency and profitability	Indicates financial sustainability	High competition may pressure margins	Narrow profit margins may hinder growth
	Debt Levels	Provides insight into financial leverage	Access to capital for expansion	High debt can lead to financial risks	Debt burden may limit financial flexibility
External Economic Issues	GDP Trends	Correlates with economic health	Business growth opportunities	Economic downturn may impact business	Reduced consumer spending during recessions
	Interest Rates	Affects borrowing costs and investments	Strategic financial planning	High-interest rates may deter investments	Economic slowdown due to high borrowing costs
	Currency Exchange Rates	Impacts international trade and revenue	Diversification in global markets	Exchange rate fluctuations pose risks	Currency depreciation affects profits
Research and Development Issues	Pipeline Success	Ensures a steady flow of innovative products	Competitive edge in the market	High investment risk in unsuccessful projects	Pipeline failures may lead to revenue loss
	Patent Expirations	Encourages continuous innovation and market exclusivity	Secures market share for patented products	Increased competition post-patent expiration	Loss of exclusivity may impact profits
	Innovation Trends	Aligns the business with evolving market needs	Attracts customers with new offerings	Rapid changes may require frequent adaptations	Failure to adapt may lead to obsolescence
Global Health Events Issues	Pandemics	Focus on healthcare solutions and innovation	Increased demand for pharmaceuticals	Supply chain disruptions and operational challenges	Regulatory changes impacting business operations
	Epidemics	Opportunities for vaccine development	Enhanced reputation for health solutions	Global economic uncertainty	Public fear impacts consumer behavior

				may affect business	
	Healthcare Policy Changes	Adaptation to evolving healthcare regulations	Alignment with industry standards	Increased compliance burden on businesses	Policy changes may lead to increased costs

8. ELEMENTARY ANALYSIS BASED ON CRITICAL CONSTITUENT ELEMENTS :

This section offers an in-depth examination of the fundamental constituent elements linked to each primary characteristic within the designated focus domain, concerning the structure of the ABCD analysis framework. Tables 5 through 8 presented below display the recognized Critical Constituent Elements (CCE) for advantageous, beneficial, constraining, and disadvantageous factors, respectively.

Table 5: Advantageous Factors Affecting the Determinant Issues and Its Critical Constituent Elements

Determinant Issues	Key Attributes	Advantageous Factors Affecting Determinant Issues	Critical Constituent Elements
Pharmaceutical Industry Issues	Market Trends	Informed decision-making based on trends	Timely adaptation to market trends for strategic planning
	Regulatory & Policy Changes	Adaptability to regulatory changes	Implementation of agile regulatory strategies for compliance
	Competitive Landscape	Awareness of industry competition	Competitive Intelligence Framework
Stakeholder Issues	Investor Sentiment	Attraction of investment with positive sentiment	Enhanced trust and confidence, attracting more investment
	Institutional Holdings	Stability in ownership structure	Promotes long-term commitment and stability, fostering a conducive environment for sustainable business growth.
	Analyst Recommendations	Accurate recommendations leading to increased investor confidence	Favorable and Consistent Analyst Endorsements
Financial Performance Issues	Revenue Growth	Indicates business health and potential	Strategic planning for market expansion and revenue streams
	Profit Margins	Reflects efficiency and profitability	Cost management strategies and operational efficiency
	Debt Levels	Provides insight into financial leverage	Effective debt management and risk mitigation
External Economic Issues	GDP Trends	Correlates with economic health	Informed economic decision-making
	Interest Rates	Affects borrowing costs and investments	Effective management of interest rate risks
	Currency Exchange Rates	Impacts international trade and revenue	Currency risk mitigation strategies
Research and Development Issues	Pipeline Success	Ensures a steady flow of innovative products	Continuous investment in research and development
	Patent Expirations	Encourages continuous	Strategic planning for patent renewal

		innovation and market exclusivity	
	Innovation Trends	Aligns the business with evolving market needs	Flexibility and adaptability to changing trends
Global Health Events Issues	Pandemics	Focus on healthcare solutions and innovation	Strategic planning for healthcare solution delivery
	Epidemics	Opportunities for vaccine development	Ongoing investment in vaccine research and development
	Healthcare Policy Changes	Adaptation to evolving healthcare regulations	Regulatory compliance and policy adaptability

Table 6: Benefit Factors Affecting the Determinant Issues and its Critical Constituent Elements

Determinant Issues	Key Attributes	Beneficial Factors Affecting Determinant Issues	Critical Constituent Elements
Pharmaceutical Industry Issues	Market Trends	Strategic planning opportunities	Enhanced strategic decision-making
	Regulatory & Policy Changes	Compliance with industry standards	Adherence to stringent industry standards and guidelines
	Competitive Landscape	Strategic positioning in the market	Effective strategic planning and market positioning
Stakeholder Issues	Investor Sentiment	Increased liquidity and value of shares	Robust investor relations and communication
	Institutional Holdings	Long-term commitment from institutional investors	Consistent engagement and collaboration with institutions
	Analyst Recommendations	Positive impact on share prices	Reliability and accuracy in analyst recommendations
Financial Performance Issues	Revenue Growth	Attracts investors and stakeholders	Sustainable business growth and market appeal
	Profit Margins	Indicates financial sustainability	Efficient cost management and profitability
	Debt Levels	Access to capital for expansion	Prudent debt management and capital allocation
External Economic Issues	GDP Trends	Business growth opportunities	Strategic alignment with economic growth prospects
	Interest Rates	Strategic financial planning	Flexible financial strategies and risk management
	Currency Exchange Rates	Diversification in global markets	Robust currency risk management and global expansion
Research and Development Issues	Pipeline Success	Competitive edge in the market	Continuous innovation and product development strategies
	Patent Expirations	Secures market share for patented products	Effective patent portfolio management and renewal strategies
	Innovation Trends	Attracts customers with new offerings	Market-driven innovation and agile product development

Global Health Events Issues	Pandemics	Increased demand for pharmaceuticals	Efficient supply chain management and production
	Epidemics	Enhanced reputation for health solutions	Effective crisis communication and public relations
	Healthcare Policy Changes	Alignment with industry standards	Adaptability to regulatory changes and compliance

Table 7: Constraint Factors Affecting the Determinant Issues and its Critical Constituent Elements

Determinant Issues	Key Attributes	Constraints Factors Affecting Determinant Issues	Critical Constituent Elements
Pharmaceutical Industry Issues	Market Trends	Imitation by competitors	Loss of competitive advantage due to imitation by competitors
	Regulatory & Policy Changes	Operational disruptions due to sudden changes	Potential disruption in operations leading to inefficiencies and difficulties in adapting to regulatory shifts
	Competitive Landscape	Increased competition leads to price wars	Reduced profit margins
Stakeholder Issues	Investor Sentiment	Volatility in sentiment affecting investments	Increased uncertainty impacting investment decisions and stock values
	Institutional Holdings	Restrictions on decision-making due to ownership structure	Limited flexibility in strategic decisions and potential missed opportunities.
	Analyst Recommendations	Overreliance on analyst opinions	Vulnerability to biased or unreliable information affecting decision-making
Financial Performance Issues	Revenue Growth	Dependent on market conditions	Vulnerability to economic fluctuations affecting revenue unpredictability.
	Profit Margins	High competition may pressure margins	Reduced profit margins due to competitive pricing pressures.
	Debt Levels	High debt can lead to financial risks	Increased financial instability and potential difficulties in debt repayment.
External Economic Issues	GDP Trends	Economic downturn may impact business	Reduced market growth and potential financial instability.
	Interest Rates	High-interest rates may deter investments	Limited access to capital for expansion and increased borrowing costs.
	Currency Exchange Rates	Exchange rate fluctuations pose risks	Business uncertainties due to variations in international currency values.
Research and Development Issues	Pipeline Success	High investment risk in unsuccessful projects	Financial losses and potential setbacks in innovation.

	Patent Expirations	Increased competition post-patent expiration	Loss of market exclusivity and intensified competitive pressures.
	Innovation Trends	Rapid changes may require frequent adaptations	Increased operational complexities and potential resource drain.
Global Health Events Issues	Pandemics	Supply chain disruptions and operational challenges	Disruption in the production and delivery of pharmaceutical products.
	Epidemics	Global economic uncertainty may affect business	Financial instability and challenges in strategic planning
	Healthcare Policy Changes	Increased compliance burden on businesses	Higher operational costs and potential legal and regulatory challenges

Table 8: Disadvantageous Factors Affecting the Determinant Issues and its Critical Constituent Elements

Determinant Issues	Key Attributes	Disadvantageous Factors Affecting Determinant Issues	Critical Constituent Elements
Pharmaceutical Industry Issues	Market Trends	Limited market growth due to trend uncertainties	Missed opportunities for expansion and reduced market share.
	Regulatory & Policy Changes	Regulatory hurdles impacting business operation	Increased operational challenges and potential legal issues
	Competitive Landscape	Market share erosion and reduced profitability	Financial losses and decreased competitiveness in the market
Stakeholder Issues	Investor Sentiment	Negative sentiment leading to stock devaluation	Decreased market capitalization and shareholder value
	Institutional Holdings	Potential conflicts of interest among stakeholders	Erosion of trust and credibility, affecting long-term investments
	Analyst Recommendations	Unreliable or biased analyst recommendations	Misinformed investment decisions and potential financial risks
Financial Performance Issues	Revenue Growth	Revenue decline may lead to financial instability	Increased financial risks and potential business downturn
	Profit Margins	Narrow profit margins may hinder growth	Limited resources for expansion and reduced competitiveness
	Debt Levels	Debt burden may limit financial flexibility	Constraints in financial manoeuvrability, and investment
External Economic Issues	GDP Trends	Reduced consumer spending during recessions	Decreased demand for products and potential revenue loss
	Interest Rates	Economic slowdown due to high borrowing costs	Constraints on business investments and growth

	Currency Exchange Rates	Currency depreciation affects profits	Reduced profitability in international transactions
Research and Development Issues	Pipeline Success	Pipeline failures may lead to revenue loss	Increased financial risks and potential business downturn
	Patent Expirations	Loss of exclusivity may impact profits	Constraints on market share and potential revenue decline
	Innovation Trends	Failure to adapt may lead to obsolescence	Reduced competitiveness and potential loss of market relevance
Global Health Events Issues	Pandemics	Regulatory changes impacting business operations	Operational disruptions, increased costs, and potential losses
	Epidemics	Public fear impacts consumer behavior	Decline in consumer confidence and changes in buying patterns
	Healthcare Policy Changes	Policy changes may lead to increased costs	Financial strain, potential operational challenges, and costs

9. QUANTITATIVE CRITICAL CONSTITUENT ELEMENTS OF FACTORS DRIVING SHARE PRICE VOLATILITY IN THE INDIAN PHARMA INDUSTRY AS PER ABCD ANALYSIS :

The critical constituent elements for each key attribute within the construct of the ABCD analysis framework for the factors impacting share price volatility in the Indian Pharmaceutical Industry are presented below:

The allocation of weights to each vital component is decided by the focus group, utilizing the subsequent ranking scale:

- 1 - Disagree
- 2 -Neutral
- 3 - Agree

The information gathered from the focus group is subsequently examined, and the findings are presented in Tables 9 to 12.

Table 9: Exhibits of Advantageous Factors of Forces Driving Share Price Volatility in the Indian Pharma Industry and their Critical Constituent Elements with the Summative Mean Score

Determinant Issues	Key Attributes	Advantageous Factors Affecting Determinant Issues	Critical Constituent Elements	Key Attributes (Total Score)	Determinant Issues (Total Score)	Total Mean Score
Pharmaceutical Industry Issues	Market Trends	Informed decision-making based on trends	Timely adaptation to market trends for strategic planning	30	84	
	Regulatory & Policy Issues	Adaptability to regulatory changes	Implementation of agile regulatory strategies for compliance	28		
	Competitive Landscape	Awareness of industry competition	Competitive Intelligence Framework	26		
Stakeholder Issues	Investor Sentiment	Attraction of investment with positive sentiment	Enhanced trust and confidence, attracting more investment	28	85	

	Institutional Holdings	Stability in ownership structure	Promotes long-term commitment and stability, fostering a conducive environment for sustainable business growth.	29		155.1
	Analyst Recommendations	Accurate recommendations leading to increased investor confidence	Favorable and Consistent Analyst Endorsements	28		
Financial Performance Issues	Revenue Growth	Indicates business health and potential	Strategic planning for market expansion and revenue streams	27	84	
	Profit Margins	Reflects efficiency and profitability	Cost management strategies and operational efficiency	29		
	Debt Levels	Provides insight into financial leverage	Effective debt management and risk mitigation	28		
External Economic Issues	GDP Trends	Correlates with economic health	Informed economic decision-making	29	86	
	Interest Rates	Affects borrowing costs and investments	Effective management of interest rate risks	28		
	Currency Exchange Rates	Impacts international trade and revenue	Currency risk mitigation strategies	29		
Research and Development Issues	Pipeline Success	Ensures a steady flow of innovative products	Continuous investment in research and development	27	83	
	Patent Expirations	Encourages continuous innovation and market exclusivity	Strategic planning for patent renewal	27		
	Innovation Trends	Aligns the business with evolving market needs	Flexibility and adaptability to changing trends	29		
Global Health Events Issues	Pandemics	Focus on healthcare	Strategic planning for	28	84	

		solutions and innovation	healthcare solution delivery		
	Epidemics	Opportunities for vaccine development	Ongoing investment in vaccine research and development	29	
	Healthcare Policy Changes	Adaptation to evolving healthcare regulations	Regulatory compliance and policy adaptability	27	

Table 10: Exhibits of Benefit Factors of Forces Driving Share Price Volatility in the Indian Pharma Industry and their Respective Critical Constituent Elements with the Aggregate Mean Score

Determinant Issues	Key Attributes	Benefit Factors Affecting Determinant Issues	Critical Constituent Elements	Key Attributes (Total Score)	Determinant Issues (Total Score)	Total Mean Score
Pharmaceutical Industry Issues	Market Trends	Strategic planning opportunities	Enhanced strategic decision-making	28	87	152.4
	Regulatory & Policy Issues	Compliance with industry standards	Adherence to stringent industry standards and guidelines	29		
	Competitive Landscape	Strategic positioning in the market	Effective strategic planning and market positioning	30		
Stakeholder Issues	Investor Sentiment	Increased liquidity and value of shares	Robust investor relations and communication	29	86	
	Institutional Holdings	Long-term commitment from institutional investors	Consistent engagement and collaboration with institutions	28		
	Analyst Recommendations	Positive impact on share prices	Reliability and accuracy in analyst recommendations	29		
Financial Performance Issues	Revenue Growth	Attracts investors and stakeholders	Sustainable business growth and market appeal	28	85	
	Profit Margins	Indicates financial sustainability	Efficient cost management and profitability	28		
	Debt Levels	Access to capital for expansion	Prudent debt management and capital allocation	29		
External Economic Issues	GDP Trends	Business growth opportunities	Strategic alignment with economic growth prospects	27	83	

	Interest Rates	Strategic financial planning	Flexible financial strategies and risk management	27		
	Currency Exchange Rates	Diversification in global markets	Robust currency risk management and global expansion	29		
Research and Development Issues	Pipeline Success	Competitive edge in the market	Continuous innovation and product development strategies	28	84	
	Patent Expirations	Secures market share for patented products	Effective Patent portfolio management and renewal strategies	27		
	Innovation Trends	Attracts customers with new offerings	Market-driven innovation and agile product development	29		
Global Health Events Issues	Pandemics	Increased demand for pharmaceuticals	Efficient supply chain management and production	27	81	
	Epidemics	Enhanced reputation for health solutions	Effective crisis communication and public relations	28		
	Healthcare Policy Changes	Alignment with industry standards	Adaptability to regulatory changes and compliance	26		

Table 11: Exhibits of Constraints Factors of Forces Driving Share Price Volatility in the Indian Pharma Industry and their Critical Constituent Elements with the Overall Mean Score

Determinant Issues	Key Attributes	Constraints Factors Affecting Determinant Issues	Critical Constituent Elements	Key Attributes (Total Score)	Determinant Issues (Total Score)	Total Mean Score
Pharmaceutical Industry Issues	Market Trends	Imitation by competitors	Loss of competitive advantage due to imitation by competitors	25	78	
	Regulatory & Policy Issues	Operational disruptions due to sudden changes	Potential disruption in operations leading to inefficiencies and difficulties in adapting to regulatory shifts	27		

	Competitive Landscape	Increased competition leads to price wars	Reduced profit margins	26		144.8
Stakeholder Issues	Investor Sentiment	Volatility in sentiment affecting investments	Increased uncertainty impacting investment decisions and stock values	26	79	
	Institutional Holdings	Restrictions on decision-making due to ownership structure	Limited flexibility in strategic decisions and potential missed opportunities.	27		
	Analyst Recommendations	Overreliance on analyst opinions	Vulnerability to biased or unreliable information affecting decision-making	26		
Financial Performance Issues	Revenue Growth	Dependent on market conditions	Vulnerability to economic fluctuations affecting revenue unpredictability.	27	78	
	Profit Margins	High competition may pressure margins	Reduced profit margins due to competitive pricing pressures.	26		
	Debt Levels	High debt can lead to financial risks	Increased financial instability and potential difficulties in debt repayment.	25		
External Economic Issues	GDP Trends	Economic downturn may impact business	Reduced market growth and potential financial instability.	25	77	
	Interest Rates	High interest rates may deter investments	Limited access to capital for expansion and increased borrowing costs.	26		
	Currency Exchange Rates	Exchange rate	Business uncertainties due to	26		

		fluctuations pose risks	variations in international currency values.			
Research and Development Issues	Pipeline Success	High investment risk in unsuccessful projects	Financial losses and potential setbacks in innovation.	26	77	
	Patent Expirations	Increased competition post-patent expiration	Loss of market exclusivity and intensified competitive pressures.	26		
	Innovation Trends	Rapid changes may require frequent adaptations	Increased operational complexities and potential resource drain.	25		
Global Health Events Issues	Pandemics	Supply chain disruptions and operational challenges	Disruption in the production and delivery of pharmaceutical products.	26	76	
	Epidemics	Global economic uncertainty may affect business	Financial instability and challenges in strategic planning	25		
	Healthcare Policy Changes	Increased compliance burden on businesses	Higher operational costs and potential legal and regulatory challenges	25		

Table12: Exhibits of Disadvantageous Factors of Forces Driving Share Price Volatility in the Indian Pharma Industry and their Critical Constituent Elements with the Total Mean Score

Determinant Issues	Key Attributes	Disadvantageous Factors Affecting Determinant Issues	Critical Constituent Elements	Key Attributes (Total Score)	Determinant Issues (Total Score)	Total Mean Score
Pharmaceutical Industry Issues	Market Trends	Limited market growth due to trend uncertainties	Missed opportunities for expansion and reduced market share.	26	77	
	Regulatory & Policy Issues	Regulatory hurdles impacting business operation	Increased operational challenges and potential legal issues	26		
	Competitive Landscape	Market share erosion and	Financial losses and decreased	25		

		reduced profitability	competitiveness in the market			
Stakeholder Issues	Investor Sentiment	Negative sentiment leading to stock devaluation	Decreased market capitalization and shareholder value.	25	76	130.3
	Institutional Holdings	Potential conflicts of interest among stakeholders	Erosion of trust and credibility, affecting long-term investments.	25		
	Analyst Recommendations	Unreliable or biased analyst recommendations	Misinformed investment decisions and potential financial risks.	26		
Financial Performance Issues	Revenue Growth	Revenue decline may lead to financial instability	Increased financial risks and potential business downturn.	25	74	130.3
	Profit Margins	Narrow profit margins may hinder growth	Limited resources for expansion and reduced competitiveness	25		
	Debt Levels	Debt burden may limit financial flexibility	Constraints in financial manoeuvrability, and investment	24		
External Economic Issues	GDP Trends	Reduced consumer spending during recessions	Decreased demand for products and potential revenue loss	25	75	130.3
	Interest Rates	Economic slowdown due to high borrowing costs	Constraints on business investments and growth	26		
	Currency Exchange Rates	Currency depreciation affects profits	Reduced profitability in international transactions	24		
Research and Development Issue	Pipeline Success	Pipeline failures may lead to revenue loss	Increased financial risks and potential business downturn	26	75	130.3
	Patent Expirations	Loss of exclusivity may impact profits	Constraints on market share and potential revenue decline	24		
	Innovation Trends	Failure to adapt may lead to obsolescence	Reduced competitiveness and potential loss of market relevance	25		
Global Health Issues	Pandemics	Regulatory changes impacting business operations	Operational disruptions, increased costs, and potential losses	26	76	130.3

	Epidemics	Public fear impacts consumer behavior	Decline in consumer confidence and changes in buying patterns	25		
	Healthcare Policy Changes	Policy changes may lead to increased costs	Financial strain, potential operational challenges, and costs	25		

10. GRAPHICAL REPRESENTATION OF AFFECTING FACTORS FOR FORCES DRIVING SHARE PRICE VOLATILITY IN THE INDIAN PHARMA INDUSTRY THROUGH ABCD ANALYSIS :

Figure 1 presents the aggregate mean score for elements influencing share price volatility within the Indian pharmaceutical sector, providing insights into the primary factor of influence according to the ABCD analysis framework.

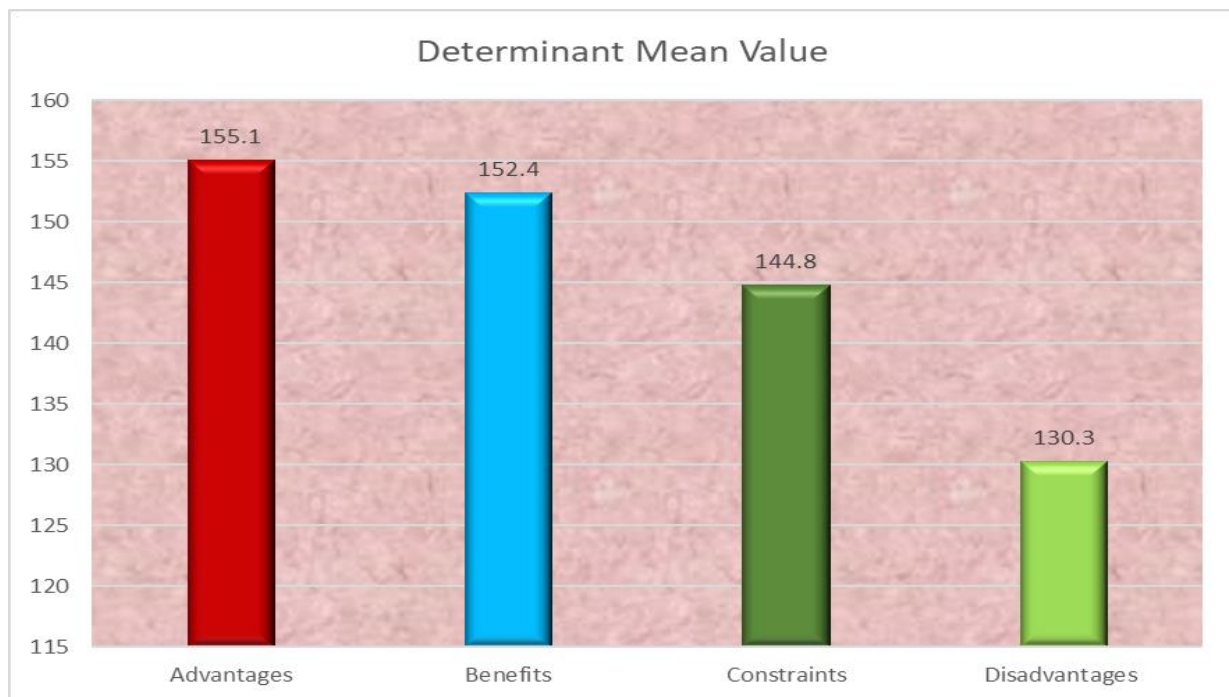


Fig. 1: Exhibits of Total Mean Score of Factors Influencing Share Price Volatility in Indian Pharma Industry as per ABCD analysis framework

Interpretation:

The visualization presented above delineates the impact of factors on share price volatility through ABCD analysis. Results obtained from the focus group interaction, utilizing a scale ranging from 1 to 3, highlight a unanimous consensus among participants regarding the substantial positive influence of advantageous factors on share price volatility. This is evident in their elevated mean score of 155.1, signifying strong agreement among stakeholders on the pivotal role of these factors in shaping share prices. Moreover, the pronounced agreement on advantageous factors is mirrored in the focus group’s recognition of the positive impact of benefits on share price volatility, reflected in a high mean score of 152.4. Participants widely acknowledge and agree on the favorable outcomes associated with these identified benefits, emphasizing the potential advantages for stakeholders. Conversely, constraints received a neutral mean score of 144.8, indicating a balanced or mixed perspective among participants. The absence of a strong inclination towards either agreement or disagreement suggests varied opinions about the impact of constraints on share prices. This neutrality implies a nuanced understanding among participants, highlighting the need for further exploration to comprehend the intricacies of these

constraining factors and their effects on share price dynamics. In contrast, disadvantages received a relatively lower mean score of 130.3, signaling a collective perception that participants are less inclined to view these factors as significant contributors to share price volatility. This lower mean score suggests a reduced level of agreement or conviction regarding the adverse effects of disadvantages on share prices. Unlike advantageous factors and benefits, participants may not perceive disadvantages as strongly influential in shaping share price dynamics according to their assessments.

11. CONCLUSIONS :

Investigating the factors influencing share price volatility in the Indian pharmaceutical sector, this study employed a comprehensive ABCD analysis framework. The results reveal a striking consensus among participants on the positive influence of advantageous factors, as reflected by the substantial mean score of 155.1. These findings contribute valuable insights into the dynamics of the sector and offer stakeholders a clearer understanding of the factors shaping share price volatility. Through this investigation, it becomes evident that the ABCD framework is well-suited for analyzing the factors driving share price volatility in the Indian pharmaceutical sector. The study showcases the framework's efficacy in comprehensively assessing various elements, strategies, and concepts specific to the industry. The implications of this research extend to informed decision-making for investors, policymakers, and industry players. Future studies could delve deeper into understanding the nuanced perspectives on constraining factors and explore potential correlations between identified factors and market trends, providing a more comprehensive picture for strategic decision-making in the Indian Pharmaceutical Sector.

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