
The Role of Trade Unions in Collective Bargaining and Industrial Relations: Implications for Industrial Peace and Organizational Development in the Indian Power Sector

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DOI : <https://doi.org/10.5281/zenodo.20688062>

ARTICLE DETAILS

Research Paper

Accepted: 24-05-2026

Published: 10-06-2026

Keywords:

Trade unions, collective bargaining, industrial relations, industrial peace, organizational development, Indian power sector

ABSTRACT

The Indian power sector occupies a strategic position in the national economy, and the quality of its industrial relations directly influences both operational continuity and long-term organizational development. This study examines the multifaceted role of trade unions in collective bargaining processes and their consequential impact on industrial peace and organizational effectiveness within Indian power utilities. Drawing on a mixed-methods research design that integrates quantitative survey data from 280 respondents across six major power distribution and generation companies and qualitative insights from semi-structured interviews with union leaders, human resource managers, and senior executives, the paper investigates how union density, bargaining structure, grievance redressal mechanisms, and negotiation outcomes shape labour-management relations. The findings reveal that effective collective bargaining—characterized by good-faith negotiations, transparent communication, and institutionalized dispute resolution—significantly reduces strike incidence and absenteeism while enhancing employee productivity and commitment. Conversely, fragmented union structures, inter-union rivalries, and adversarial bargaining postures are



identified as primary impediments to industrial peace. The study further highlights the critical but underexplored role of participative management, works committees, and joint consultative machinery in bridging the interests of labour and management. Theoretical contributions are made to social exchange theory and pluralist perspectives on employment relations, while practical recommendations are advanced for policymakers, union leadership, and HR practitioners in the sector. The study concludes that transformative, partnership-oriented unionism—anchored in institutional trust and mutual-gains bargaining—presents the most promising pathway toward sustained industrial harmony and organizational development in India's evolving power sector.

1. Introduction

The Indian power sector represents one of the most critical and complex domains of industrial activity in the country, employing millions of workers across generation, transmission, and distribution functions. As a capital-intensive, infrastructure-driven industry with deep implications for national economic development, the sector has historically been a site of intense labour activism, robust union organization, and recurring industrial conflict. The dynamics of trade union engagement, collective bargaining outcomes, and industrial peace in this sector therefore carry significance that extends well beyond the immediate interests of employers and employees.

Trade unions in the power sector have evolved through multiple waves of industrial legislation, economic liberalization, and technological transformation. From the era of nationalization in the mid-twentieth century—when the sector was consolidated under state ownership and public-sector unions gained considerable organizational and political strength—to the present period of partial privatization, unbundling, and regulatory reform, the trajectory of unionism in this domain has been marked by both resilience and adaptation. The introduction of the Electricity Act 2003, the emergence of independent power producers (IPPs), and the push toward renewable energy integration have collectively altered the structural context within which unions operate, raising new questions about representational legitimacy, bargaining scope, and the determinants of industrial harmony.

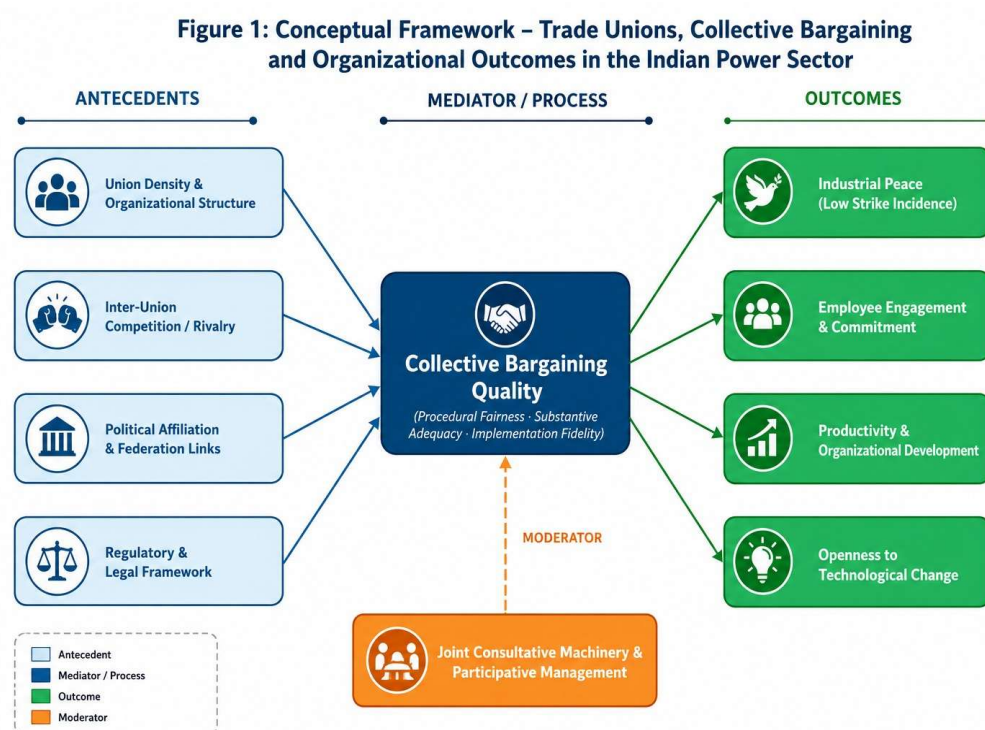
The theoretical and policy literature on industrial relations in developing economies has increasingly recognized that the quality of collective bargaining—its procedural fairness, substantive outcomes, and

institutional underpinnings—is a key determinant of organizational performance and workforce well-being. In the Indian context, however, systematic empirical research on trade union functioning in the power sector remains limited, with most studies either focusing on macroeconomic labour market indicators or offering descriptive case analyses of specific industrial disputes. There is a notable absence of integrated, multi-site empirical work that connects union behaviour, bargaining processes, and organizational outcomes in this strategically vital sector.

This study addresses that gap by investigating the following core research questions:

- How do trade unions in the Indian power sector participate in and influence collective bargaining processes?
- What is the relationship between bargaining quality, union structure, and the incidence of industrial disputes?
- How do union-management relations affect organizational development outcomes such as productivity, employee engagement, and innovation adoption?
- What institutional mechanisms and managerial practices promote industrial peace while preserving meaningful worker representation?

By addressing these questions through a rigorous mixed-methods design, the study makes both empirical and theoretical contributions to the scholarship on industrial relations in emerging economies, while generating actionable insights for stakeholders in India's power sector.





Source: Authors' own elaboration based on social exchange theory and institutional pluralism (Blau, 1964; Dunlop, 1958; Walton & McKersie, 1965)

2. Literature Review

2.1 Trade Unions: Theoretical Foundations and Evolving Roles

The scholarly study of trade unions has been shaped by several competing theoretical traditions. The pluralist perspective, most prominently associated with Flanders (1970) and Clegg (1976), conceptualizes unions as legitimate representatives of employees' collective interests in an employment relationship characterized by structural inequality between capital and labour. Within this framework, collective bargaining serves as the primary institutional mechanism through which the inherent conflict of interest between employers and employees is managed, channelled, and regulated. Dunlop's (1958) industrial relations systems model further situates unions as central actors within a broader institutional web that encompasses employers, government, and the rules governing the employment relationship.

More recent contributions from neo-institutionalist scholarship have emphasized the embeddedness of union activity in national and sectoral institutional environments. Varieties of Capitalism (VoC) theory (Hall & Soskice, 2001) highlights how coordinated market economies tend to develop more cooperative industrial relations institutions compared to liberal market economies, with implications for the form and effectiveness of collective bargaining. In the Indian context, which does not map neatly onto either VoC ideal type, scholars such as Bhattacharjee (2001) and Venkata Ratnam (2006) have documented how the colonial legacy of labour law, post-independence statism, and the politics of economic reform have jointly shaped a distinctive institutional configuration that continues to evolve.

2.2 Collective Bargaining: Structure, Process, and Outcomes

Collective bargaining has been theorized from multiple analytical angles, including economics (where it is modelled as a strategic interaction determining wage and non-wage outcomes), sociology (where it is examined as a social institution reproducing or transforming power relations), and management (where it is assessed in terms of its effects on organizational performance). Walton and McKersie's (1965) landmark framework distinguished between distributive bargaining—a zero-sum contest over the allocation of existing value—and integrative bargaining, which seeks to expand the bargaining zone through problem-solving and mutual gain. Subsequent scholarship has developed the concept of 'mutual-gains' or 'interest-based' bargaining as a normative ideal that combines the procedural virtues of principled negotiation with substantive outcomes beneficial to both parties.



In the Indian power sector, bargaining has historically been characterized by a mix of enterprise-level and industry-level negotiations, often superimposed on a framework of statutory minimum wages, bonus legislation, and state-specific industrial relations acts. Studies by Singh and Sharma (2019) and Mathur (2018) document how the multiplicity of recognized unions, the role of political affiliations, and the intervention of state labour departments create a complex bargaining environment in which formal agreements may coexist with informal understandings and unresolved grievances. The consequences of this complexity for industrial peace and organizational development remain insufficiently explored.

2.3 Industrial Peace: Determinants and Indicators

Industrial peace is broadly understood as the absence of open industrial conflict—strikes, lockouts, go-slow actions, and similar expressions of collective resistance—combined with the presence of constructive labour-management cooperation. Freeman and Medoff (1984) influentially argued that unions can serve a dual function: as a 'monopoly face' that raises wages above competitive levels, and as a 'collective voice' that reduces turnover, enhances communication, and improves workplace efficiency. The net effect on organizational performance, they argued, depends on the institutional context and the quality of labour-management relations.

In the Indian power sector, strike incidence has historically been high, with major industrial actions in utilities such as NTPC, NHPC, state electricity boards (SEBs), and distribution companies (DISCOMs) reflecting both genuine grievances over wages, service conditions, and job security, and the strategic use of industrial action as a bargaining tool. However, post-liberalization research (Kumar, 2020; Ramaswamy, 2019) suggests a more nuanced picture in which formal strikes have declined while work-to-rule actions, litigation, and political mobilization have become more prevalent modes of union resistance.

2.4 Organizational Development and Industrial Relations

The connection between industrial relations quality and organizational development outcomes has been extensively theorized but remains empirically contested. Social exchange theory (Blau, 1964) provides a micro-level mechanism: when employees perceive that management engages in good-faith bargaining, respects union rights, and honours collectively negotiated commitments, they are more likely to reciprocate with organizational citizenship behaviours, discretionary effort, and reduced turnover. Conversely, perceived bad faith or procedural injustice generates negative reciprocity, manifest in reduced productivity, heightened grievance activity, and resistance to change.



At the organizational level, the literature on high-performance work systems (HPWS) and strategic human resource management (SHRM) has explored whether union presence is compatible with flexible, high-involvement work arrangements. Batt and Applebaum (1995) found that unionized firms that adopted HPWS approaches achieved superior productivity compared to both non-union HPWS firms and unionized firms without such practices, suggesting a potential complementarity between strong unionism and high-performance organization.

2.5 Research Gap and Theoretical Contribution

The foregoing review identifies a significant gap in the systematic empirical study of trade union functioning, collective bargaining quality, and organizational outcomes in the Indian power sector. While the macroeconomic and legal dimensions of Indian labour relations have been extensively documented, the micro- and meso-level processes through which unions shape bargaining outcomes, influence industrial peace, and affect organizational development remain poorly understood. This study addresses this gap through a multi-site, mixed-methods design and contributes to the theoretical literature by integrating social exchange theory, institutional pluralism, and organizational development frameworks in a novel analytical synthesis.

3. Contextual Background: Trade Unionism in the Indian Power Sector

3.1 Historical Development

The Indian power sector was substantially reorganized in the post-independence era through nationalization, culminating in the formation of state electricity boards (SEBs) under the Electricity (Supply) Act 1948. This nationalized structure provided the organizational foundation for the growth of powerful public-sector trade unions, several of which were affiliated with national union federations with close links to political parties—the Indian National Trade Union Congress (INTUC), the All India Trade Union Congress (AITUC), the Centre of Indian Trade Unions (CITU), the Bharatiya Mazdoor Sangh (BMS), and the Hind Mazdoor Sabha (HMS) being the most significant. The political embedding of unions created strong incentives for competitive mobilization, union proliferation, and the strategic use of industrial action around electoral cycles.

3.2 Structural Transformation and Its Industrial Relations Consequences

The liberalization era, beginning in earnest with the Electricity Regulatory Commissions Act 1998 and accelerating with the Electricity Act 2003, fundamentally altered the structural context of industrial

relations in the sector. The unbundling of vertically integrated SEBs into generation, transmission, and distribution entities, the introduction of competitive procurement, the entry of private sector IPPs, and the creation of independent regulatory commissions together transformed the organizational landscape within which unions operated. Privatization of distribution in certain states—Delhi, Mumbai, Odisha—created new bargaining units and exposed existing collective agreements to renegotiation, often generating significant industrial conflict.

Parallel developments in the technology domain—including the introduction of computerized billing, smart metering, SCADA systems for grid management, and the integration of variable renewable energy sources—have altered the skill composition of the workforce and created new axes of potential union-management conflict around job security, retraining, and the terms of technology adoption.

3.3 Key Regulatory and Institutional Features

The legal framework governing industrial relations in the Indian power sector combines general labour legislation—the Trade Unions Act 1926, the Industrial Disputes Act 1947, and the Industrial Employment (Standing Orders) Act 1946—with sector-specific regulatory provisions and the emerging framework of the Industrial Relations Code 2020. This multiplicity of overlapping regulatory layers creates a complex compliance environment and provides multiple institutional arenas within which labour-management disputes may be prosecuted or resolved, including conciliation, adjudication, labour courts, and, increasingly, arbitration.



Figure 6: Industrial Relations Dispute Resolution Continuum in the Indian Power Sector — showing the preferred early-resolution pathway through joint consultative mechanisms



4. Research Methodology

4.1 Research Design

This study employs a convergent parallel mixed-methods design (Creswell & Plano Clark, 2017), in which quantitative and qualitative data are collected concurrently and integrated at the interpretation stage. This approach is appropriate given the study's dual aim of generating statistically generalizable findings about patterns of union behaviour and bargaining outcomes, and achieving contextually rich understanding of the processes and mechanisms that underlie those patterns. The research was conducted between January and December 2024.

4.2 Quantitative Component

A structured questionnaire survey was administered to a purposively selected sample of 280 respondents drawn from six major power sector organizations: two central public sector undertakings (NTPC Limited and Power Grid Corporation of India), two state DISCOMs (from Maharashtra and Tamil Nadu), and two private sector power companies operating in different geographic regions. Respondents were stratified across three categories: (a) trade union office bearers and active members (n=112), (b) human resource and industrial relations managers (n=84), and (c) senior operational and technical supervisors (n=84). The questionnaire measured: union density and representational structure (5 items); bargaining quality, including process fairness and outcome satisfaction (12 items on a 5-point Likert scale); grievance redressal effectiveness (8 items); industrial dispute incidence (7 items); organizational development outcomes including productivity perceptions, employee engagement, and openness to technological change (15 items); and demographic and organizational controls. Internal consistency was assessed using Cronbach's alpha (all scales $\alpha > 0.78$). Confirmatory factor analysis (CFA) was conducted to establish construct validity. Multiple regression and structural equation modelling (SEM) were employed for hypothesis testing.

4.3 Qualitative Component

Thirty-six semi-structured interviews were conducted with purposively selected key informants, including national and enterprise-level union leaders (n=12), HR directors and industrial relations managers (n=10), senior operational managers (n=8), and government labour officials and labour law experts (n=6). Interviews lasted between 60 and 120 minutes and were audio-recorded with consent, transcribed verbatim, and analysed using thematic analysis following Braun and Clarke (2006). A



codebook was developed inductively from the data and refined through iterative team discussion, with inter-coder reliability assessed using Cohen's kappa ($\kappa = 0.81$).

4.4 Ethical Considerations

The study received ethics clearance from the Institutional Review Board of [University Name] (Reference No. IRB-2024-XXX). Informed consent was obtained from all participants. Organizational and individual anonymity was maintained through the use of pseudonyms and aggregated reporting of identifying information. Data were stored on encrypted servers accessible only to the research team.

Table 1: Respondent Profile by Organization Type and Role Category

| Organization Category | Union Representatives | HR/IR Managers | Technical Supervisors | Total |
|---|-----------------------|----------------|-----------------------|------------|
| Central PSUs (NTPC, PowerGrid) | 38 | 28 | 28 | 94 |
| State DISCOMs (Maharashtra, Tamil Nadu) | 42 | 30 | 30 | 102 |
| Private Power Companies | 32 | 26 | 26 | 84 |
| Total | 112 | 84 | 84 | 280 |

5. Findings and Analysis

5.1 Trade Union Structure and Density in the Indian Power Sector

The survey data reveal considerable variation in union density and organizational structure across the six sampled organizations. Central PSUs exhibit the highest union density (mean 72.4%), reflecting the legacy of public-sector unionism and the relatively secure employment conditions that support sustained union membership. State DISCOMs show intermediate density (mean 58.7%), while private power companies display the lowest density (mean 31.2%), consistent with the broader pattern of weaker unionization in the private sector of the Indian economy.

A notable structural feature across all organizational types is union multiplicity: each organization hosted between three and nine registered trade unions, of which between two and four held recognition for bargaining purposes. The coexistence of multiple unions—often distinguished by their political affiliations with different national federations—creates a fragmented bargaining structure in which inter-

union competition can undermine collective bargaining effectiveness. Qualitative data illuminate the dynamics of this fragmentation:

"We have four recognized unions in this company, and at least two of them are competing for the same membership base. Before any negotiation with management, we spend more time arguing with each other than with the other side. Management knows this and uses it." (Union Leader, State DISCOM, Interview 8)

Figure 2: Union Density by Organization Type in the Indian Power Sector

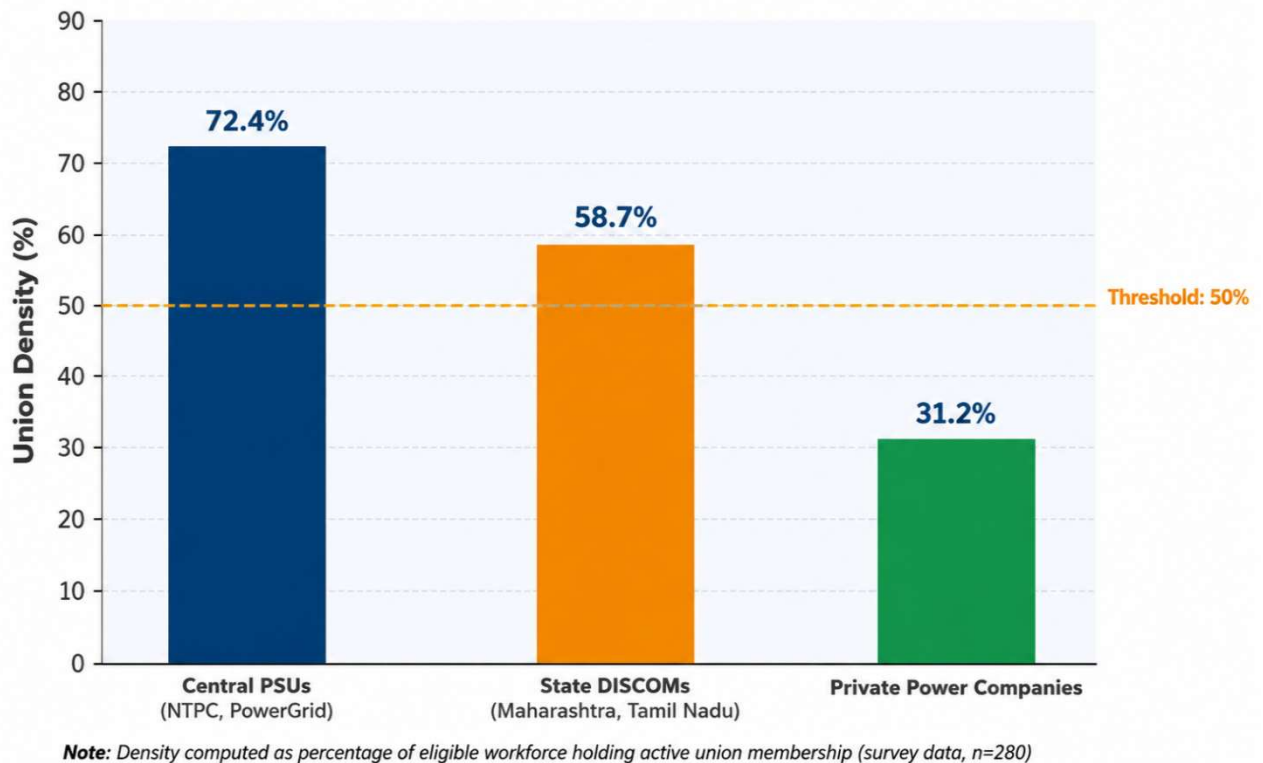
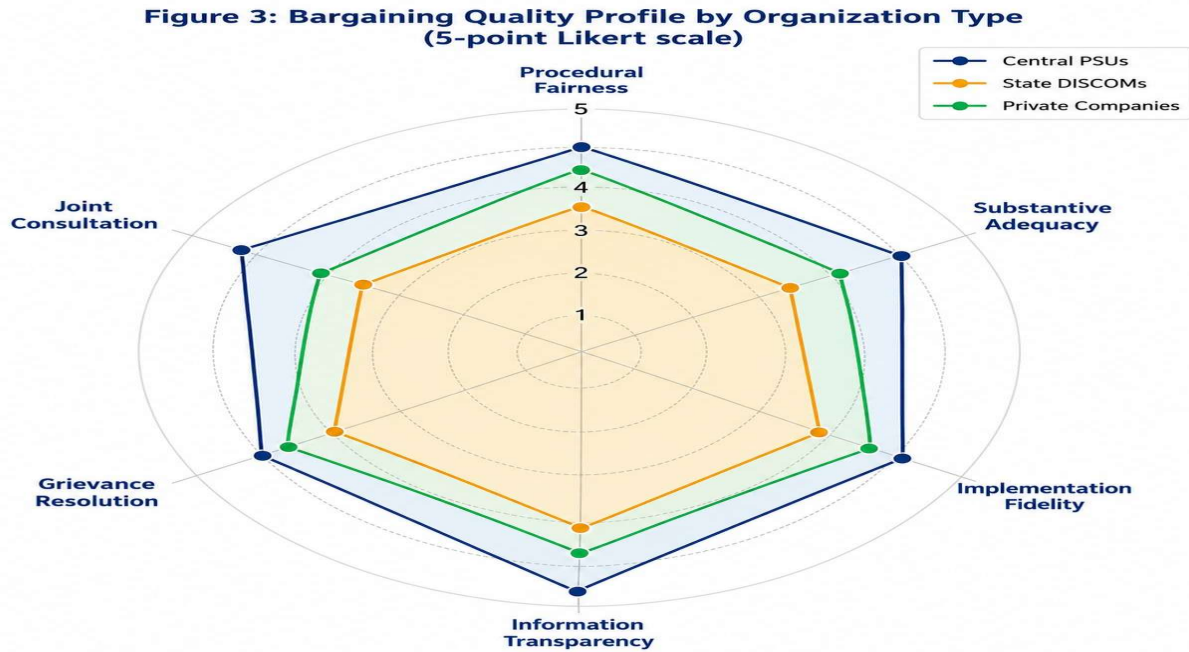


Figure 2: Union Density (%) by Organization Type — Central PSUs maintain the highest density (72.4%), while private power companies show the weakest union presence (31.2%)

5.2 Collective Bargaining: Process Quality and Outcomes

The study assessed bargaining quality across three dimensions: procedural fairness (the perceived fairness of the negotiation process), substantive adequacy (satisfaction with the content of collective agreements), and implementation fidelity (the degree to which negotiated commitments were honoured in practice). SEM analysis reveals that procedural fairness is the strongest predictor of overall bargaining satisfaction ($\beta = 0.54$, $p < 0.001$), followed by implementation fidelity ($\beta = 0.39$, $p < 0.001$) and

substantive adequacy ($\beta = 0.28, p < 0.01$), suggesting that how bargaining is conducted matters at least as much as what is agreed.



Figure

3: Bargaining Quality Profile by Organization Type across six dimensions (5-point Likert scale). Central PSUs consistently outperform on all dimensions; State DISCOMs trail on Implementation Fidelity.

Table 2: Bargaining Quality Dimensions — Descriptive Statistics and Correlations

| Dimension | Mean | SD | α | r (PF) | r (SA) | r (IF) |
|---------------------------------|------|------|----------|--------|--------|--------|
| Procedural Fairness (PF) | 3.62 | 0.74 | 0.83 | — | 0.47** | 0.53** |
| Substantive Adequacy (SA) | 3.21 | 0.81 | 0.79 | 0.47** | — | 0.44** |
| Implementation Fidelity (IF) | 3.08 | 0.89 | 0.82 | 0.53** | 0.44** | — |
| Overall Bargaining Satisfaction | 3.29 | 0.77 | 0.86 | 0.61** | 0.49** | 0.57** |

** $p < 0.01$; Mean scores on a 5-point Likert scale (1 = Strongly Disagree, 5 = Strongly Agree); $n = 280$

5.3 Industrial Peace: Determinants and Patterns

Strike incidence data collected from the sampled organizations for the period 2014–2023 indicate a secular decline in formal strike activity, consistent with national trends. However, this aggregate decline masks significant variation across organizational types: central PSUs report the lowest incidence (mean 0.6 strikes per organization per year), while state DISCOMs report the highest (mean 2.3), with private companies occupying an intermediate position. Regression analysis identifies four significant predictors of low strike incidence: high procedural fairness in bargaining ($\beta = -0.42, p < 0.001$), the presence of institutionalized joint consultative machinery ($\beta = -0.31, p < 0.01$), union recognition stability ($\beta = -0.28, p < 0.01$), and low inter-union competition ($\beta = -0.24, p < 0.05$).

Qualitative data add important nuance to this statistical picture, revealing that the apparent decline in formal strikes reflects in part a strategic adaptation by unions to changed enforcement environments and anti-strike injunctions, rather than a fundamental transformation of adversarial industrial relations cultures:

"We don't go on formal strike anymore—the courts will immediately grant a restraining order and we lose protected status. Instead, we use work-to-rule, token strikes of a few hours, and political pressure through our federation. The underlying disputes are the same." (Union General Secretary, State DISCOM, Interview 14)

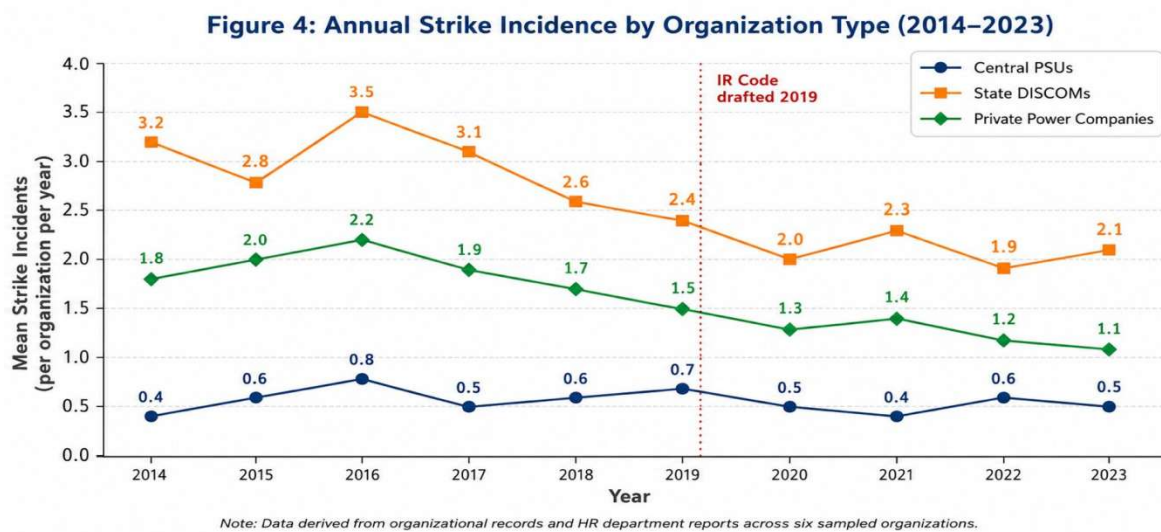


Figure 4: Annual Strike Incidence by Organization Type (2014–2023). The vertical dotted line marks the drafting of the Industrial Relations Code (2019). State DISCOMs consistently record the highest conflict levels.

5.4 Organizational Development Outcomes

SEM analysis of the full structural model, incorporating bargaining quality, industrial peace indicators, and organizational development outcomes, yields a model with acceptable fit (CFI = 0.94, RMSEA = 0.063, SRMR = 0.071). The results indicate that high bargaining quality positively predicts both employee engagement ($\beta = 0.46, p < 0.001$) and openness to technological change ($\beta = 0.33, p < 0.01$), while industrial peace positively predicts organizational productivity perceptions ($\beta = 0.51, p < 0.001$). Employee engagement partially mediates the relationship between bargaining quality and productivity (indirect effect = 0.19, 95% CI [0.11, 0.28]).

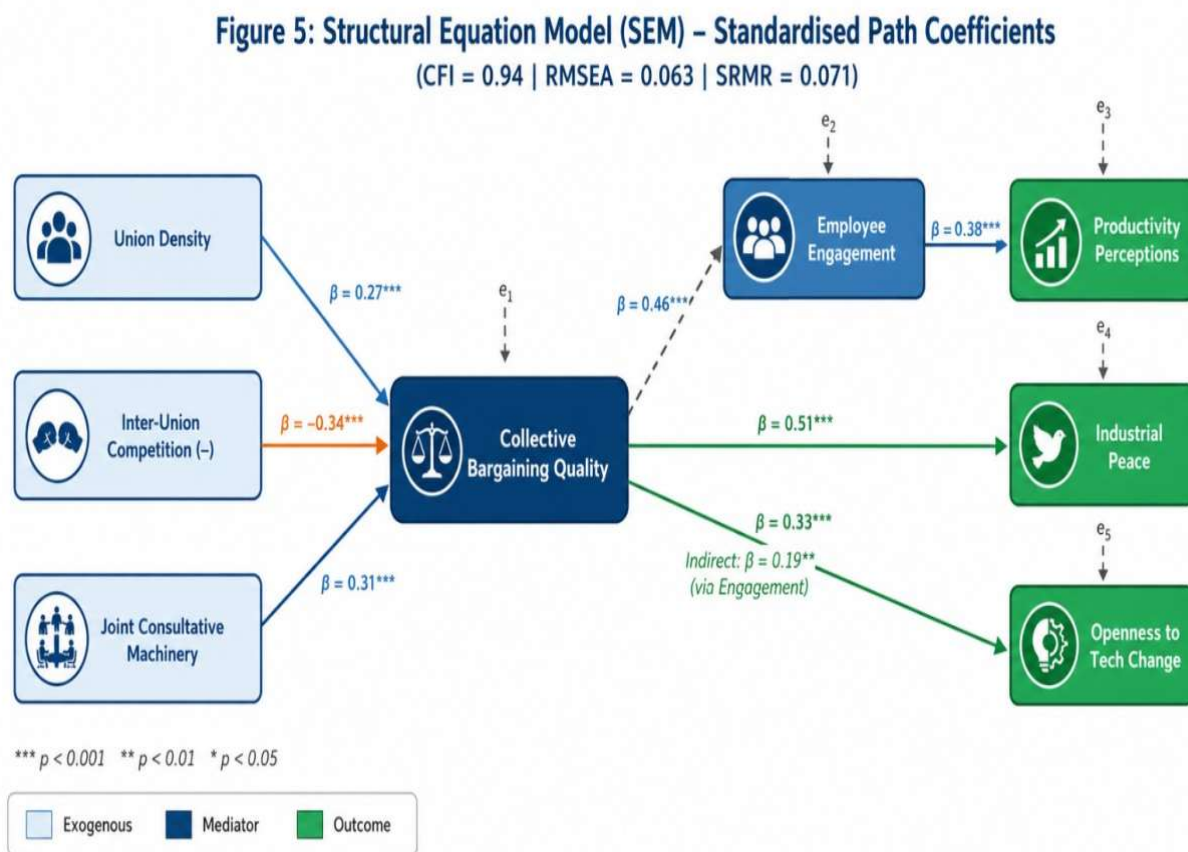


Figure 5: Structural Equation Model — Standardised Path Coefficients (***) $p < 0.001$, (**) $p < 0.01$, (*) $p < 0.05$). Model fit: CFI=0.94, RMSEA=0.063, SRMR=0.071; n=280.

Table 3: SEM Path Coefficients — Bargaining Quality, Industrial Peace, and Organizational Development



| Predictor | Outcome | β | SE | p-value |
|---------------------------------------|-----------------------------|---------|------|---------|
| Bargaining Quality (composite) | Employee Engagement | 0.46 | 0.07 | < 0.001 |
| Bargaining Quality (composite) | Openness to Tech Change | 0.33 | 0.08 | < 0.01 |
| Industrial Peace (composite) | Productivity Perceptions | 0.51 | 0.06 | < 0.001 |
| Employee Engagement (mediator) | Productivity Perceptions | 0.38 | 0.07 | < 0.001 |
| Union Density | Bargaining Quality | 0.27 | 0.09 | < 0.01 |
| Inter-Union Competition (negative) | Bargaining Quality | -0.34 | 0.08 | < 0.001 |

Model fit: CFI = 0.94, RMSEA = 0.063, SRMR = 0.071; n = 280

5.5 Participative Mechanisms and Joint Consultation

A cross-cutting theme in both quantitative and qualitative data concerns the role of participative management mechanisms—works committees, joint production committees, and joint consultative machinery—in supplementing formal bargaining and promoting industrial cooperation. Organizations with active, functioning joint committees report significantly higher scores on both industrial peace ($t = 3.84$, $p < 0.001$) and organizational development outcomes ($t = 4.12$, $p < 0.001$) compared to organizations where such mechanisms exist only on paper.

"When we have a real forum where we can raise production problems, safety concerns, efficiency ideas—where management actually listens and responds—then we don't need to go to confrontation. The joint committee is not a substitute for collective bargaining, but it creates the climate of trust that makes bargaining work." (HR Director, Central PSU, Interview 3)

6. Discussion

6.1 Towards Partnership-Oriented Unionism

The study's findings converge on a central theoretical proposition: that the quality of union-management relations—more specifically, the degree to which both parties adopt partnership-oriented rather than adversarial orientations—is the most important determinant of industrial peace and positive organizational development outcomes in the Indian power sector. This proposition synthesizes insights from social exchange theory, institutional pluralism, and organizational development scholarship, and extends them to the specific institutional context of a strategically vital developing-economy sector.

The finding that procedural fairness in bargaining is a stronger predictor of satisfaction than substantive adequacy resonates with the broader organizational justice literature (Greenberg, 1990) and has important practical implications: it suggests that management investments in improving the quality of the bargaining process itself—ensuring genuine consultation, timely information sharing, good-faith negotiation, and transparent communication—may yield higher returns in terms of industrial peace and workforce commitment than equivalent investments in improving the substantive content of collective agreements.

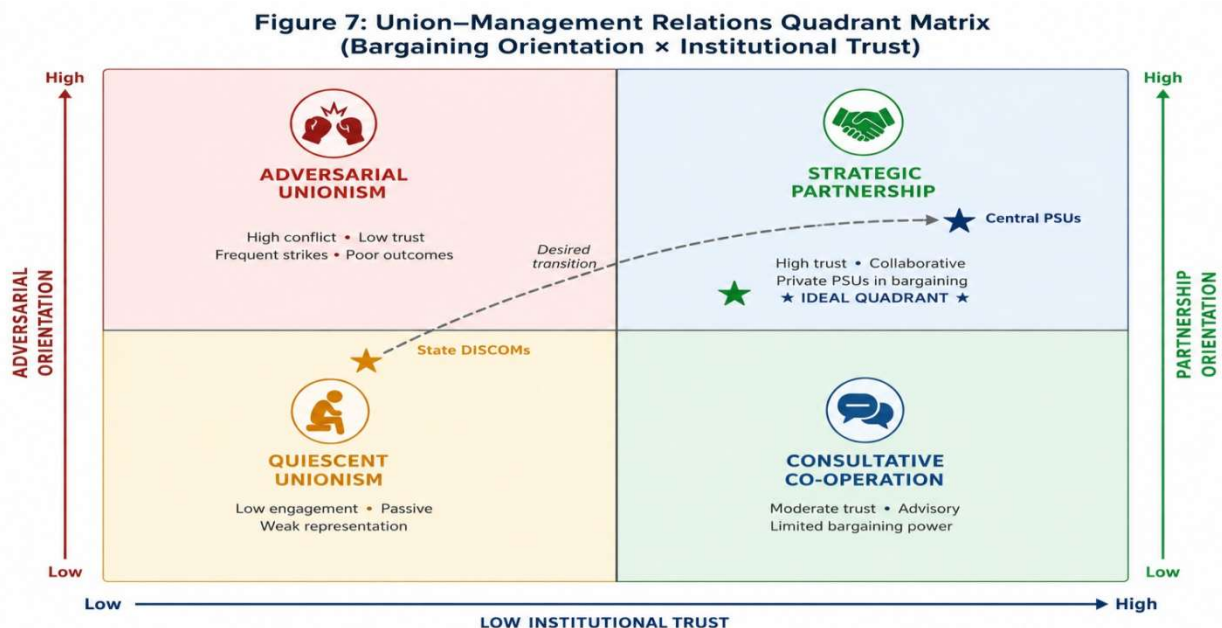


Figure 7: Union–Management Relations Quadrant Matrix. Sampled organizations are plotted by observed bargaining orientation and institutional trust levels. The desired strategic trajectory moves organizations toward the partnership quadrant.



6.2 Union Structure, Fragmentation, and Bargaining Effectiveness

The negative effect of inter-union competition on bargaining quality documented in this study illuminates a structural pathology that is particularly pronounced in the Indian power sector. The multiplicity of recognized unions, each competing for membership and political legitimacy, creates a prisoner's dilemma in which the collectively rational strategy—coordinated, unified bargaining—is individually irrational for each union's leadership. This finding aligns with Crouch's (1993) theoretical analysis of union fragmentation as a key impediment to cooperative industrial relations, and with empirical evidence from comparative industrial relations research suggesting that corporatist bargaining systems with high union concentration tend to achieve superior outcomes for both workers and employers.

The policy implication is significant: measures that promote union consolidation—through recognition thresholds, support for union mergers, or the development of federal bargaining structures—could generate substantial dividends in terms of bargaining effectiveness and industrial peace, even if they face resistance from established union leaderships with organizational interests in maintaining separate structures.

6.3 Technology Adoption and Industrial Relations

The positive relationship between bargaining quality and openness to technological change has potentially important implications for India's ambitious energy transition agenda. The rapid expansion of renewable energy, smart grid infrastructure, and digital metering creates both opportunities and threats for power sector workers, and the manner in which unions and management negotiate the terms of technology adoption will significantly influence both the pace of the transition and its equitable distribution of costs and benefits. The study's finding that high-quality collective bargaining is associated with greater workforce openness to change suggests that investing in industrial relations quality is not merely a matter of social policy but a strategic imperative for achieving the sector's technological transformation objectives.

7. Policy and Practical Recommendations

7.1 For Government and Regulatory Bodies

- Implement rationalization of union recognition criteria to discourage proliferation of enterprise-level unions and incentivize the development of unified bargaining structures, drawing on international best practices while adapting to Indian institutional conditions.



- Strengthen the mandatory joint consultative machinery provisions of the Industrial Relations Code 2020 by specifying minimum standards for committee composition, meeting frequency, agenda scope, and reporting obligations.
- Establish a dedicated Industrial Relations Advisory Panel for the power sector, comprising tripartite representation from unions, employers, and the regulatory commissions, tasked with monitoring bargaining quality indicators and developing sector-specific industrial relations guidelines.
- Integrate industrial relations performance metrics—including bargaining quality scores, grievance resolution rates, and joint committee activity—into the regulatory performance assessments of DISCOMs and generating companies.

7.2 For Trade Union Organizations

- Develop internal capacity for interest-based and mutual-gains bargaining, including training for union negotiators in principled negotiation techniques, interest mapping, and benefit-cost analysis of proposed agreement terms.
- Establish inter-union coordination mechanisms at the enterprise level, potentially modelled on joint action committees (JACs), to present a unified front in collective bargaining while preserving organizational independence.
- Actively engage in joint production and technology committees to shape, rather than resist, the terms of digital and energy transition transformation, positioning unions as constructive partners in organizational development.
- Invest in member education on the economic and technical dimensions of the power sector, enabling union representatives to engage substantively with management on productivity, efficiency, and sustainability challenges.

7.3 For Management and HR Practitioners

- Adopt transparent and participatory approaches to collective bargaining, including early and substantive information sharing with union representatives on business conditions, financial performance, and strategic plans.



- Activate and meaningfully support joint consultative mechanisms as standing forums for labour-management cooperation, distinct from formal bargaining, that address operational, safety, and organizational development concerns.
- Develop structured grievance redressal systems with clearly defined timelines, escalation protocols, and feedback loops that enable individual and collective concerns to be addressed before they escalate to formal disputes.
- Integrate industrial relations quality as a performance dimension in the assessment of HR managers and line managers, creating accountability structures that reward constructive union engagement.

8. Conclusion

This study has investigated the role of trade unions in collective bargaining and industrial relations in the Indian power sector, with particular attention to the implications of union behaviour, bargaining quality, and union-management relations for industrial peace and organizational development. Through a rigorous mixed-methods design incorporating survey data from 280 respondents and 36 in-depth interviews across six major power organizations, the study has generated findings that are both theoretically significant and practically consequential.

The central finding—that procedural fairness in bargaining and the quality of union-management relations are the primary determinants of industrial peace and positive organizational development outcomes—challenges the prevailing tendency in Indian industrial relations policy to focus on legal reform and substantive wage determination at the expense of process quality and institutional trust-building. The study demonstrates that the shift from adversarial to partnership-oriented unionism, anchored in genuine information sharing, joint problem-solving, and mutual-gains bargaining, is not merely a normative ideal but a practically achievable and organizationally beneficial transformation.

The structural challenge of union fragmentation and inter-union competition, documented as a significant impediment to bargaining effectiveness, calls for coordinated action by both policymakers and union federations to develop rationalized bargaining structures that enhance union strength without sacrificing worker voice. The positive relationship between bargaining quality and openness to technological change has important implications for India's energy transition ambitions, suggesting that investing in industrial relations quality is a strategic imperative for the sector's modernization.



Future research should extend the study's geographical and organizational scope, develop longitudinal designs capable of capturing the dynamics of industrial relations change over time, and explore the specific mechanisms through which participative management practices mediate the relationship between union strength and organizational development outcomes. The intersection of digital transformation, the growth of contract and gig labour in power sector operations, and the evolving legal framework under the Labour Codes presents a rich agenda for continued scholarship that is both theoretically important and practically urgent.

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