

Evaluating the Role of Fiscal and Monetary Policies in Shaping Incentive Structures and Performance Outcomes in the Pharmaceutical Sector: A Comparative Study from Madhya Pradesh

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Abstract

The pharmaceutical sector, being both labor-intensive and innovation-driven, heavily depends on robust incentive frameworks to optimize employee performance. In the backdrop of the Union Budget 2024–25 and recent RBI monetary interventions, this study explores how fiscal and monetary policies shape the design and implementation of both financial and non-financial incentives in the pharmaceutical industry of Madhya Pradesh.

Using a comparative design, this paper examines two sets of pharmaceutical companies—one with higher exposure to government-linked policy benefits and one operating independently of such benefits. The study aims to identify differences in incentive adoption, employee engagement, and performance outcomes.

Primary data was collected from 160 respondents including HR managers, middle managers, and frontline employees through structured questionnaires. Statistical analysis using SPSS involved ANOVA, regression analysis, and factor extraction to identify relationships between incentive type, policy exposure, and productivity indices.

Results indicate that organizations which integrated fiscal benefits (such as production-linked incentives, GST rebates, and public procurement preferences) offered more structured financial and non-financial incentives, including performance bonuses, career development plans, wellness programs, and recognition schemes. Furthermore, policy-backed firms demonstrated significantly higher performance ratings and lower attrition.

The findings emphasize the need for aligning macroeconomic policy tools with enterprise-level HR strategies. Recommendations include targeted policy communication, incentive-linked tax deductions, and incentive audit mechanisms under MSME and pharmaceutical policy reforms.

Keywords: Pharmaceutical Sector, Employee Incentives, Fiscal Policy, Monetary Policy, Employee Performance, Union Budget 2024–25, Madhya Pradesh

1. Introduction

Employee motivation and performance are critical drivers of organizational success, particularly in the pharmaceutical industry, where regulatory compliance, precision, and innovation are crucial. While financial incentives like salary increments and bonuses are widely recognized tools, non-financial motivators—such as job recognition, growth opportunities, and wellness benefits—have also proven essential in retaining skilled manpower.

In the recent Union Budget 2024–25, the government announced production-linked incentives, R&D subsidies, and reduced GST slabs for bulk drug manufacturers, which could potentially enhance enterprise capacity to reward and retain talent. Simultaneously, RBI's accommodative stance through interest rate moderation and refinance support indirectly strengthens industry liquidity.

This research aims to analyze how such macroeconomic enablers influence HR strategy in the pharmaceutical industry. Specifically, it compares firms with high and low engagement with policy instruments to uncover differences in incentive design and their measurable impact on employee performance in Madhya Pradesh.

2. Literature Review

2.1 Incentive Systems in the Pharmaceutical Sector The pharmaceutical sector's high dependency on compliance, accuracy, and knowledge management necessitates effective incentive systems (Rana & Mahapatra, 2020). These systems are designed to drive engagement, reduce errors, and foster innovation. Financial incentives—such as productivity bonuses and project completion rewards—are commonly employed. However, non-financial tools like flexible work environments, career advancement tracks, and wellness programs are equally vital in influencing employee performance (Kapoor & Sinha, 2019).

2.2 Role of Fiscal Policy in Industry Incentives Union Budgets have played a crucial role in shaping enterprise-level HR strategies by offering policy-linked financial leeway. The Budget 2024–25 introduced specific fiscal provisions such as R&D subsidies, production-linked incentive (PLI) extensions, tax rationalization, and procurement mandates through Government e-Marketplace (GeM) for pharmaceutical firms (MoF, 2024). Studies suggest these fiscal moves improve organizational liquidity, enabling better workforce retention through enhanced incentive schemes (Verma & Desai, 2022).

2.3 Impact of Monetary Policy on Organizational Investment in Human Capital The Reserve Bank of India's monetary policy significantly affects credit availability and interest rates, which in turn influence enterprise decisions regarding resource allocation—including workforce development. Easing repo rates and special refinance windows under SIDBI and NABARD have allowed pharmaceutical MSMEs to divert funds towards structured HR programs (Sharma, 2023). Literature notes that monetary accommodation encourages risk-taking in employee training and long-term benefits planning (Joshi & Sen, 2021).

2.4 Comparative Incentive Efficacy: Financial vs. Non-Financial Tools Financial incentives are typically more immediate and quantifiable, but their impact may diminish over time due to expectation saturation (Luthra & Rathi, 2020). Non-financial incentives—especially those addressing personal

development and psychological engagement—are shown to produce longer-term satisfaction and productivity gains. Recent comparative frameworks assess these incentive modes across productivity, turnover intention, and employee satisfaction metrics.

2.5 Sector-Specific Research in Pharmaceutical HR Practices Pharmaceutical firms, particularly those engaged in generic manufacturing and clinical research, have demonstrated varied adoption of incentive practices. Sectoral studies indicate that export-oriented firms use structured appraisal systems and global retention benchmarks, while domestic firms lean on contextual motivators like family healthcare coverage and referral rewards (Saxena & George, 2020).

2.6 Research Gaps and Policy Convergence Despite growing interest in HR formalization, few studies directly link macroeconomic policy shifts with changes in incentive structure and performance outcomes. Most existing models treat HR strategy as insulated from budgetary and monetary flows. This study addresses this research gap by introducing a comparative approach and examining how policy-supported versus independent firms differ in designing and delivering performance incentives.

In summary, the literature supports the thesis that fiscal and monetary interventions can play a catalytic role in shaping firm-level incentive ecosystems. However, empirical investigation in specific sectors like pharmaceuticals remains limited, particularly in Tier-2 regions like Madhya Pradesh.

3. Research Objectives and Hypotheses

Objectives:

1. To assess the impact of fiscal policy (Union Budget 2024–25) on the design of financial and non-financial incentives in pharmaceutical firms.
2. To analyze the role of monetary policy in enabling liquidity for HR strategy implementation.
3. To compare the performance outcomes in policy-integrated versus independent pharmaceutical organizations.

Hypotheses:

- **H₀₁:** Fiscal incentives do not significantly affect the structure of employee incentive programs in the pharmaceutical industry.
- **H_{a1}:** Fiscal incentives significantly affect the structure of employee incentive programs in the pharmaceutical industry.
- **H₀₂:** Monetary policy does not significantly influence the ability of firms to implement incentive-based performance models.
- **H_{a2}:** Monetary policy significantly influences the ability of firms to implement incentive-based performance models.
- **H₀₃:** There is no difference in performance outcomes between policy-integrated and non-policy-integrated pharmaceutical firms.

- **H_{a3}:** There is a significant difference in performance outcomes between policy-integrated and non-policy-integrated pharmaceutical firms.

4. Research Methodology

4.1 Research Design: The study adopts a comparative and causal-comparative research design, evaluating two categories of pharmaceutical firms—those leveraging fiscal/monetary policy support and those that do not. A mixed-method approach combining quantitative and qualitative tools is used.

4.2 Study Area: The research was conducted in the cities of Bhopal, Indore, and Ujjain in Madhya Pradesh, which host several mid-size pharmaceutical firms.

4.3 Sample and Sampling Technique: The target population comprises HR heads, middle-level managers, and operational staff in pharmaceutical companies. A purposive sampling method was used to collect responses from 160 participants, evenly divided between policy-engaged and non-policy-engaged firms.

4.4 Data Collection Methods:

- **Primary Data:** Structured questionnaires measuring awareness of policy incentives, incentive schemes in place, and employee performance metrics.
- **Secondary Data:** Union Budget 2024–25 documents, RBI monetary policy circulars, and pharmaceutical sector reports.

4.5 Tools of Analysis: The following statistical tools were applied using SPSS v26:

- Descriptive Statistics (mean, standard deviation)
- ANOVA (to test variance across groups)
- Multiple Regression (to assess influence of fiscal/monetary exposure)
- Factor Analysis (to determine core performance influencers)

4.6 Data Collection Timeline: Data was collected between February and March 2025, ensuring insights aligned with early-stage reactions to the latest budget and policy reforms.

5. Data Analysis and Interpretation

The data gathered from 160 participants—80 from policy-integrated firms and 80 from non-policy-integrated firms—was analyzed using SPSS. Below are the key findings structured across descriptive and inferential statistics:

Table 1: Distribution of Respondents by Role and Policy Exposure

Role	Policy-Integrated	Non-Integrated	Total
HR Managers	20	20	40
Middle Managers	30	30	60

Operational Staff	30	30	60
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Interpretation: Equal representation across roles and organizational categories ensures a balanced comparison.

Table 2: Awareness of Fiscal and Monetary Policy Support

Awareness Level	Policy Firms (%)	Non-Policy Firms (%)
High	67.5	23.8
Moderate	25.0	46.2
Low	7.5	30.0

Interpretation: Firms with greater policy integration show higher awareness levels, validating purposive sampling logic.

Table 3: Average Use of Incentive Tools (Scale: 1–5)

Incentive Type	Policy Firms	Non-Policy Firms
Financial Bonuses	4.3	3.2
Skill Development Support	4.0	2.9
Wellness Programs	3.8	2.5
Recognition & Awards	4.2	3.4

Interpretation: Structured incentive strategies are more prevalent in policy-engaged firms, particularly in non-financial domains.

Table 4: ANOVA – Incentive Utilization vs. Policy Exposure

Source	SS	df	MS	F	Sig.
Between Groups	15.24	1	15.24	6.78	0.011
Within Groups	351.08	158	2.22		
Total	366.32	159			

Interpretation: The variance in incentive use between policy-integrated and non-integrated firms is statistically significant ($p < 0.05$).

Table 5: Regression – Policy Exposure and Performance Ratings

Predictor	B	Beta	t	Sig.
Constant	2.11		4.75	.000
Policy Awareness Score	0.38	0.46	5.26	.000

Interpretation: A positive and significant relationship exists between policy awareness and employee performance ratings.

Table 6: Factor Analysis – Key Incentive Clusters

Factor Name	Variables Loaded	Eigenvalue	Variance Explained
Structured Recognition	Awards, Certifications, Public Praise	2.76	28.4%
Career Development Tools	Skill Training, Mentorship, Promotions	2.14	22.1%
Health and Welfare	Insurance, Mental Wellness, Leave Support	1.71	17.3%

Interpretation: The three extracted factors together explain 67.8% of variance in employee incentive strategies.

Table 7: Thematic Summary – Key Informant Insights

Theme	Frequency	Sample Quote
Budget Impact on HR Flexibility	15	“Incentive funds increased post-PLI incentives.”
Role of RBI Policy in Fund Access	13	“SIDBI-backed credit gave us room for staff rewards.”
Value of Non-Financial Recognition	17	“A certificate or title matters more than money at times.”

Interpretation: Qualitative responses support the quantitative evidence on the differential impact of policy support.

6. Hypotheses Testing

Hypotheses	Test Applied	Calculated Value	p-value	Hypotheses Status
H ₀₁ : Fiscal incentives do not significantly affect incentive structures in pharmaceutical firms.	ANOVA	F = 6.78	0.011	Rejected
H _{a1} : Fiscal incentives significantly affect incentive structures in pharmaceutical firms.	ANOVA	F = 6.78	0.011	Accepted
H ₀₂ : Monetary policy does not influence incentive-based performance modeling in firms.	Regression Analysis	$\beta = 0.46$	0.000	Rejected
H _{a2} : Monetary policy significantly influences incentive-based performance modeling in	Regression Analysis	$\beta = 0.46$	0.000	Accepted

firms.				
H ₀₃ : No difference exists in performance outcomes across policy-integrated and non-integrated firms.	ANOVA & Regression	Significant	<0.05	Rejected
H _{a3} : A significant difference exists in performance outcomes across policy-integrated and non-integrated firms.	ANOVA & Regression	Significant	<0.05	Accepted

Interpretation: The statistical tests confirm that fiscal and monetary policies significantly influence employee incentive strategies and performance outcomes in pharmaceutical firms. Policy-integrated firms demonstrated more structured HR practices and better employee engagement, validating all research hypotheses.

7. Conclusion and Policy Recommendations

This research analyzed how fiscal and monetary policies shape the structure and impact of employee incentive strategies in the pharmaceutical sector in Madhya Pradesh. Using a comparative approach, it evaluated the differences in HR practices between policy-integrated and non-integrated firms.

Findings revealed that firms actively leveraging fiscal benefits under Union Budget 2024–25—such as PLI schemes and GST reductions—were more likely to adopt structured incentive programs. These included both financial (bonuses, salary hikes) and non-financial incentives (recognition schemes, wellness initiatives, and skill development). Monetary policy, particularly interest subvention and SIDBI refinancing, played a crucial role in freeing liquidity to invest in workforce engagement.

Statistical analyses confirmed that policy awareness positively influences employee performance outcomes, reinforcing the synergy between economic policy and organizational behavior. Non-policy-integrated firms lagged in both awareness and execution of strategic incentive planning, leading to relatively lower performance scores.

Policy Recommendations:

- Policy Communication Platforms:** Establish dedicated information portals for real-time updates on fiscal/monetary benefits tailored for pharma HR leaders.
- HR-Incentive Linkage Audits:** Encourage organizations to align their HR metrics with policy benefits via third-party certification mechanisms.
- Subsidy-Tied Performance Indices:** Link government subsidies to demonstrable improvements in incentive transparency and employee satisfaction.
- Monetary Integration Training:** Facilitate RBI-partnered workshops to train MSME pharma firms on accessing liquidity for employee development.
- Sectoral HR Modernization Scheme:** Launch a Pharma HR Formalization Mission under the MSME umbrella, offering soft loans and tax rebates for digitized, policy-aligned incentive models.

These steps will ensure a policy-aware, performance-driven work culture in the pharmaceutical industry, bridging gaps between macroeconomic direction and micro-level HR execution.

8. Limitations and Suggestions for Future Research

Limitations:

1. **Regional Focus:** The study is limited to select cities in Madhya Pradesh and may not generalize across India's broader pharmaceutical landscape.
2. **Cross-Sectional Design:** Data was collected at a single point in time post-Budget 2024–25 and may not reflect long-term policy impacts.
3. **Limited Sample Size:** Although representative, the sample of 160 respondents may not capture niche pharma operations or small-scale units.
4. **Self-Reported Bias:** Employee performance metrics were based on perception-based feedback, which may have social desirability bias.
5. **Policy Scope:** The study emphasized Union Budget and RBI policy influence but excluded state-specific incentives.

Suggestions for Future Research:

1. **Longitudinal Impact Studies:** Track incentive outcomes and employee performance over multiple quarters following major budget changes.
2. **Inclusion of State-Level Policies:** Analyze how state pharmaceutical policies complement national-level fiscal and monetary interventions.
3. **Sectoral Segmentation:** Disaggregate findings by pharmaceutical sub-sectors such as generics, formulations, and biotech.
4. **Comparative Region Studies:** Expand the comparative design across states like Gujarat, Maharashtra, and Telangana.
5. **Digital Incentive Tracking Models:** Explore HRMS-integrated frameworks to automate the tracking of incentive delivery and workforce response.

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