

Organize to Innovate: Intellectual Property Regimes, Technology Adoption and Firm Structure¹

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Abstract

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How do firms choose their organizational design to innovate better? We use **The Patents (Amendment) Act, 2002** which initiated a stronger patents regime in India as a quasi-natural experiment to identify the causal effect of incentives for innovation on firm structure. We find that: stronger IP protection leads to a significant increase in both employment and total compensation of managers relative to non-managers. This increase in managerial compensation is due to a sharp increase in incentive pay for middle managers rather than top managers. While both the number of managerial layers (vertical growth) and the span of control (horizontal growth) of an average manager increased because of the reform, the increase in managerial compensation is positively and robustly associated with horizontal growth rather than vertical growth of the firms. All these effects are significantly stronger for the firms that were technologically advanced before the reform. Our findings suggest that stronger IP leads to an increase in both within-firm and between-firm income inequality, with stronger evidence for between-firm inequality.

Keywords: Intellectual Property Regimes, High-tech and Low-tech firms, Managerial Compensation, Span of Control

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