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Employee Suggestion Schemes and Innovation Success

Employee suggestion schemes as a measure to stimulate innovation success are common in the business sector and have been used widely for many years. Their persistent application and broad distribution indicate that these systems are indeed successful. Despite their long tradition and frequent use, however, there are only a few studies on the effects of such schemes. Our contribution is to report the results of an empirical study on the effects of suggestion schemes and organisational innovations on innovation success. Our data source is the Mannheim Innovation Panel (MIP).

Employee suggestion systems aim to increase the orientation of employees' behaviour towards company performance, and to increase the efficient use of human capital compared to a system of fixed wages and salaries. By aligning the employees' and the companies' goals and using rewards for innovative ideas, it is intended to use the employees' specific knowledge which would otherwise not be utilized. The implementation of an employee suggestion scheme is therefore an attempt to use the scarce resource of information more efficiently.

In contrast to the popular opinion that such measures benefit both the company and the employees, there is only rare empirical evidence concerning the question of whether the systems really reach their goals. The major reason for this lack of empirical evidence is probably the difficulty in obtaining representative data from a large number of firms. However, the 2003 spell of the Mannheim Innovation Panel (MIP) included questions on the use of incentive instruments for innovation. In addition, the MIP collected several variables on the success of innovation activities. Thus, the data provide the opportunity to test the effects of the different incentive measures. One instrument is the existence and relevance of systems of employee suggestion schemes. In addition to financial incentives, the use of organisational innovations is also investigated. In particular, approaches to using human capital more efficiently and the delegation of responsibility are considered. In this article we report the results of a study on the effects of such systems on innovation performance.

Using a sample of 1300 German companies, we investigate the effects on cost reductions and sales increases which are the result of quality improvements. A number of control variables are included as well. It turns out that employee suggestion schemes have significantly positive effects on both cost efficiency and sales expansion due to quality improvements. It is also useful to delegate decision making as this has a significant negative impact on unit production cost. Organisational measures to improve the use of human capital have a significant effect on sales expansion. This has some intuitive appeal as a better use of human resources should lead to products of higher quality.

Furthermore, the degree of innovativeness is affected by firm size. Larger companies are the more effective ones. Not unexpectedly, the expenditure on innovation per employee has a positive impact as well. Firms stating that cost leadership is one of their strategic aims, realise more sales with quality-improved products.

In the next step, we investigate whether innovativeness is related to employment. Put differently, the concern is frequently voiced that employee suggestion schemes are used to economise on the production process, which might imply a smaller number of employees. This could be one way to reduce costs.

Our dependent variable in this section of the empirical study is expected employment change of the companies. It turns out that cost reductions have no impact on expected employment. This may have been the case because labour might be partly substituted by capital if process innovations are implemented. However, we find no evidence for the somewhat problematic situation of employee suggestion schemes leading to less employment via cost reductions. In contrast, if a company realises higher sales due to

improved products, expected employment increases. Hence, the overall result of our study is that employees need not necessarily fear negative effects on job security.

Firm size has a negative impact on expected employment changes. Interestingly enough both the innovation expenditure per employee and the patent stock divided by the number of employees are positively significant. Hence innovativeness has a positive and not a negative effect, as is sometimes suspected. The wage is negatively and the output positively significant. Therefore our control variables work as expected.