Intangible Innovation in Organizations: The Case of Performance Appraisals

Marc-Arthur DIAYE¹, Nathalie GREENAN², Julie ROSAZ³

ABSTRACT

Performance appraisals (called also subjective evaluation interviews) are widespread in most OECD countries. For instance, in the US over 90% of large organizations employ some performance appraisal system (Murphy and Cleveland, 1991) and over 75% of state agencies require annual performance appraisals (Seldon, Ingraham and Jacobson, 2001). While performance appraisals are one the most widely researched areas in organizational psychology (see for instance Catano et al. 2007), they remain so limited in economic literature that, to the best of our knowledge, there is no specific economic definition of performance appraisals. This is quite surprising since a significant number of empirical papers in economic literature deal directly or indirectly with performance appraisals (see for instance Medoff and Abraham 1980; Baker, Gibbs and Holmstrom 1994; Gibbs and Hendricks 2004; Engellandt and Riphahn 2004; Brown and Heywood 2005; Diaye, Greenan and Urdanivia 2008; Addison and Belfield 2008).

These empirical papers seem to suggest that performance appraisals are designed not only to evaluate ex post the effort of the employees but are also designed as an ex ante selection device of workers based on specific criteria. For instance Diaye, Greenan and Urdanivia (2008) using a matched employer/employee survey on Computerization and Organizational Change (survey "Changements Organisationnels et Informatisation", COI) conducted in 1997, show that incentive mechanisms with performance appraisals always include in addition to the traditional incentive effect, a high selection effect whose consequence is to attract the agents whose desutility of effort is the weaker. As a consequence, one can expect that performance appraisals positively influence firms' profitability. Hence performance appraisals look like an innovative intangible capital which enters into firms' production functions. And it may be the case that the "efficiency" of performance appraisals depends on the organizational structure and ICT of firms.

This paper aims at identifying the role played by ICT in the "efficiency" of performance appraisals. Related to the previous question, this paper aims also at analyzing whether performance appraisals impact the way firms manage the skills of their employees (for instance firms may react by firing some employees and hiring new skills). Especially, we will estimate the impact of performance appraisals on employees' turnover within firms.

The dataset that we use, is the new matched employer/employee survey on Computerization and Organizational Change (survey "Changements Organisationnels et Informatisation", COI) conducted in 2006 (see www.enquetecoi.net). To the contrary of the COI 1997 survey which concerns only manufacturing firms, the COI 2006 concerns all industrial sectors.

Finally we use two kind of econometric methods: the propensity score-matching method and a switching method.

¹Center for Labour Studies, University of Evry (EPEE) and TEPP (FR n° 3126, CNRS). Email address: marc-arthur.diaye@cee.enpc.fr.

²Center for Labour Studies and TEPP (FR n° 3126, CNRS). Email address: nathalie.greenan@cee.enpc.fr.

³University of Lyon, CNRS, GATE. Email address: rosaz@gate.cnrs.fr.

REFERENCES

Addison J.T, Belfield C.R. (2008): "The Determinants of Performance Appraisal Systems: A Note (Do Brown and Heywood's Results for Australia Hold Up for Britain)", British Journal of Industrial Relations, Vol. 46, pp.521-531.

Baker G., Gibbs M., Holmstrom B. (1994): "The Internal Economics of the Firms: Evidence from Personnel Data", Quarterly Journal of Economics, Vol. 109, pp.881-919.

Brown M., Heywood J.S. (2005): "Performance appraisal systems: determinants and change", British Journal of Industrial Relations, Vol. 43, pp. 659-679.

Catano V.M., Darr W., Campbell C.A. (2007): "Performance Appraisal of Behavior-Based Competencies: A reliable and valid procedure", Personnel Psychology, Vol. 60, pp.201-230.

Diaye M-A., Greenan N., Urdanivia W. M. (2008): Subjective evaluation of performance and evaluation interview: Empirical evidence from France, in "The Analysis of Firms and Employees: Quantitative and Qualitative Approaches" (S. Bender, J. Lane, K. Shaw, F. Andersson, T. von Wachter editors), The National Bureau of Economic Research, The University of Chicago Press, Chapitre 3.

Engellandt A., Riphahn R.T. (2004): "Incentive Effects of Bonus Payments: Evidence from an International Company", Miméo University of Basel, presented at the First Annual IZA Workshop on Behavioral and Organizational Economics (Bonn, May 30-31 2005).

Gibbs M., Hendricks W. (2004): "Do Formal Salary Systems Really Matter?", Industrial and Labor Relations Review, Vol. 58, pp.71-93.

Medoff J.L., Abraham K.G. (1980): "Experience, Performance, and Earnings", Quarterly Journal of Economics, Vol. 95, pp.703-736.

Murphy K.R., Cleveland J.N. (1991): "Performance Appraisal. An Organizational Perspective", Needham Heights, MA: Allyn and Bacon.

Seldon S.C., Ingraham P.W., Jacobson W. (2001): "Human Resource Practices in State Government: Findings from a National Survey", Public Administration Review, Vol. 61, pp.598-614.