



# ESRI Research Bulletin

## *Examining the determinants and consequences of skill gaps within firms*

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This Bulletin summarises the findings from: McGuinness, Seamus and Ortiz, Luis. (2016) "Skill gaps in the workplace: measurement, determinants and impacts", *Industrial Relations Journal*, 47(3), pp.1468-2338. Available online: <http://dx.doi.org/10.1111/irj.12136>



# Examining the determinants and consequences of skill gaps within firms<sup>1</sup>

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## INTRODUCTION

Skill gaps exist when the skill levels of workers are insufficient to meet the requirements of their job. There is a distinct lack of research in this area, which is surprising given that skill gaps represent a primary motivating factor in the training investment decisions of both firms and workers; furthermore, skill gaps are believed to negatively impact firm level performance and worker earnings and career progression. In addition, given that skill gaps among workers can be measured through both worker and employer surveys, little is known about the degree of accuracy of or the correlation between both measurement approaches. The paper exploits some novel aspects of the Ireland's 2006 National Employment Survey (NES) to address two central gaps in the literature, namely:

- (1) To assess the determinants and relationship between skill gaps, measured from the perspective of both employers and employees, in order to draw conclusions regarding the main drivers of the accurate recognition of training requirements within firms.
- (2) To determine the degree to which skill gaps affect training expenditures and firm-level performance.

## WHAT FACTORS DETERMINE THE MUTUAL RECOGNITION OF SKILL GAPS WITHIN FIRMS?

It is only through mutual recognition of skill gaps that employer training will be initiated and gratefully received, so that productivity is increased. If skill gaps are only recognised by workers, no employer training is likely to take place and potential productivity gaps are likely to remain. Conversely, if skill gaps are only recognised by employer, workers may not be willing to fully participate in any training process, as they do not believe they are necessary to improve their productivity. Our results show that it is more common that employees recognise skill gaps when firms do so than vice versa. The level of agreement was higher for skills or competences related to IT, management or communication.

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The results from a multivariate model reveal that the main factors driving the mutual identification of skill gaps seem to be factors related to the degree of communication between management and the company. Human Resource Management (HRM) and collective bargaining stand out among the factors that facilitate the mutual recognition of skill gaps or, alternatively, the absence of such arrangements tend to drive asymmetries where employers report problems not perceived by staff and vice versa. In the case of collective bargaining, it seems that bargaining at the sector or industry level is more decisive for facilitating this agreement than bargaining at other levels. This fits with the beneficial role of sector level agreement for skill formation found in other research. Within Europe, co-operation at the sectoral level is often apparent in the form of co-operative investment funds, such as Skillnets in Ireland, through which employers and trade-unions co-ordinate sectoral training requirements.

While fostering or promoting social dialogue at a sector level could be a way of diagnosing skill gaps among their workforce, a well-developed HRM works in the same direction. Performance evaluation, job description and consultation on job change are demonstrated to be valuable ways for management to diagnose the skill gaps among their workforce.

#### **WHAT ARE THE IMPACTS OF SKILL GAPS ON AVERAGE WAGE COSTS AND TRAINING EXPENDITURES?**

The research confirms that skill gaps are a key determinant of training investments, and also demonstrates a statistically significant inflationary effect of skill gaps on average labour costs. These findings, which demonstrate the causal links between skill gaps and both training investments and company competitiveness, reinforces the importance of implementing structures and systems that lead to the correct identification of skill gaps within firms.