

# Worker embodied technologies and mobility

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## OBJECTIVES

- This research aims to understand whether exposure to the Learnership and Research and Development (R&D) incentives leads to new knowledge becoming embodied in the workers
- We examine the extent to which workers that are exposed to these incentives earn a wage premium when they switch to another firm

## KEY RESULTS

- Workers in the manufacturing sector experience a 3 per cent wage premium when they switch jobs
- Those workers that come from a firm with a Learnership Allowance, and move into a firm without learnerships, experience a higher premium of 5 per cent
- We find similar results for workers shifting from a firm exposed to the R&D incentive scheme. These workers earn a premium of 4.6 per cent compared with only 3 per cent for other switchers

## METHODOLOGY

- We use employer-employee matched data for the South African manufacturing sector for the period 2009-2013, and track the movement of employees between firms
- We identify the effect by comparing the wage premium of workers in firms with incentives that switch into a firm with no incentives, with the wage premium for those switching into a firm that has these incentives
- We include individual, firm and time fixed effects as well as time varying controls for individual and firm characteristics

## IMPACT OF SWITCHING FIRMS ON WORKER WAGES

- To control for self-selection of job switchers, we focus on the difference in the wage premium of different types of switchers:

Switcher category	LI <sup>1</sup>	R&D <sup>2</sup>
i) From a firm without the specified incentive to one with	0.031*** (0.001)	0.032*** (0.001)
ii) From a firm with the specified incentive to one without	0.019*** (0.003)	0.015*** (0.004)
iii) From a firm without the specified incentive to another one without	-0.001 (0.003)	0.010*** (0.003)
iv) From a firm with the specified incentive to another with	0.001 (0.005)	-0.009 (0.006)

<sup>1</sup> LI refers to the Learnership incentive

<sup>2</sup> R&D refers to the Research and Development incentive

Note: The methodology used for this analysis follows Abowd et al. (1999). Standard errors are presented in parentheses. \*\*\* indicates statistical significance at the 1% level. Control variables for firm and worker specific effects are included as are time dummies.

## CONCLUSION

- We find a wage premium for workers exposed to the Learnership and R&D incentives, implying that the knowledge is embodied in the workers themselves and travels with them
- Our findings suggest that in addition to any potential productivity gains for firms associated with the Learnership and R&D incentives, exposure to these incentives are also beneficial for workers themselves by increasing the value of their outside options and allowing them to switch to higher paid jobs

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