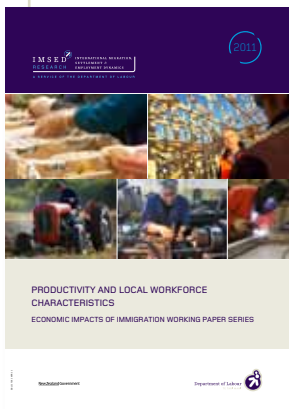


## At a glance

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### PUBLICATION:

### ECONOMIC



## PRODUCTIVITY AND LOCAL WORKFORCE COMPOSITION

### Economic Impacts of Immigration Working Paper Series

*David C Maré and Richard Fabling*

This paper investigates the relationship between the productivity of firms and the characteristics of the local population where the firm is located. Three characteristics of the local population are focused upon – namely the proportions that are highly qualified, newly arrived in the area, and foreign-born.

A positive relationship is found between productivity and population density, which is consistent with a range of agglomeration mechanisms. The benefits of density are stronger for small firms and for new firms.

Firms operating in areas where a high proportion of the workforce is highly qualified (that is, they hold a tertiary degree) experience higher productivity than similar firms in areas with a smaller proportion of highly qualified workers.<sup>1</sup> The benefits of a skilled local workforce are greater for firms in industries that use skilled labour intensively, and for firms in industries with high expenditure on R&D.<sup>2</sup>

Neither the proportion of the population that is new to the area nor the proportion that is foreign-born relate to firm productivity. However, looking only at firms in industries that provide local goods and services, one finds that these firms are more productive in geographic areas where more foreign-born and people new to the area are to be found. This suggests that some of the productivity advantages associated with new people may stem from their effects as consumers rather than as workers.

Further disaggregation of the local workforce by skill, foreign-born and new to the area finds evidence of a positive productivity effect of 'highly skilled overseas-born and new to the area'.<sup>3</sup> However, the pattern of results across groups does not tell a consistent story, and may reflect the changing composition of migrants to New Zealand over time. The productivity advantages of firms in areas where there is a high proportion of New Zealand-born new to the area or of high-skilled are positive but more modest than for foreign-born.

The existence of a link between population density (especially high-skilled) and firm productivity raises the possibility that productivity may be increased by spatial policies that promote the accumulation and distribution of skills. However, a national policy to exploit such benefits requires knowledge of which geographic areas are likely to benefit most. This study highlights differences in the benefits firms receive from different dimensions of workforce composition – an important first step in the design and targeting of potential spatially-oriented policies.

➔ Papers from the Economic Impacts of Immigration Working Paper Series can be obtained at: <http://www.immigration.govt.nz/migrant/general/generalinformation/research/impacts.htm>

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1. This is true even when controlling for the quality of the firms' own labour input.

2. Where more than 0.5% of the industry's total expenditure is on R&D.

3. Note that overseas-born who have recently arrived in the area are not necessarily recent arrivals in New Zealand – they may have been in New Zealand for many years.

PACIFIC

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ECONOMIC

GLOBAL MOBILITY

REFUGEE