

Industrial Employment Prospects in Ageing Economies. A Comparison of Japan and Australia.

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Abstract

Introduction

Population ageing is a demographic trend, that received a significant attention of labour market analysts over the last decades in most of developed and many developing countries. The critical question they ask is: How will the shift to stagnant and declining share of supply of young, new entrants to the labour market and an unparalleled growth in the proportion of workers aged 55+ affect their employment prospects in particular industries?

This study addresses this question. It assesses past and future projected effects of the changes in the labour force age profile on industries' employment prospects in Japan and Australia.

Methodology and Data

The effects of ageing were isolated with the application of the decomposition technique. The difference between employment rates of two periods was decomposed into ageing and employment rate effects. A number of alternative scenarios for the industries' employment rates was developed based on the results of the decomposition.

The employment rates were calculated from the census data covering the period of 30 years in Australia and 40 years in Japan. The future industries' employment rates were projected with application of linear and logarithmic extrapolations techniques.

Results

The labour force ageing affects particular industries differently. The most negatively affected are tertiary industries for which employment growth the ageing acts as a break. Had their been no ageing, the employment rate in tertiary industries would have been 3.4 and 1.1 percentage points higher in Japan and Australia in 2000 and 2001 respectively. Among tertiary industries, the negative effects of ageing are the largest for Wholesale and Retail Trade and Finance, Insurance, Property and Business in both countries and Services, Transport, Storage and Communication in Japan. The magnitude of the ageing effects is directly associated with the relatively high employment share in these tertiary industries of the youngest segment of the labour force; persons aged 15-24. Primary industries, are the only industries for which the ageing has positive (in Japan) and negligible impact (in Australia). This is due to these industries employing the highest employment share of persons aged 55+.

Given the continuity of current trend in mortality, fertility, migration and age-specific industries' employment rates, the effects of ageing are projected to extrapolate in future. If current employment demand trends continues, and unless significant labour productivity gains occur, this may lead to labour shortages in tertiary industries, especially pronounced in the Services, Wholesale and Retail Trade, Finance, Insurance, Property and Business industries in both countries.

Discussion

The decomposition method applied in the above analysis inherently assumes very limited elasticity/adjustability of the industries' age-specific employment profiles. In the past, these profiles remained relatively stable, that is, particular industries displayed very strong tendencies to employ particular age groups. There is a great deal of uncertainty about future adjustments in industries' age-specific employment profiles, that may occur as a result of ageing i.e. shortage and oversupply of particular age groups. The decomposition technique does not allow for the measurement of the degree of age-specific industries' employment elasticities. Such measures would be very useful in assessing the degree of the adaptability of employment demand of particular industries to changing labour supplies.