

Assessing the Korean Labor Market Using Labor Supply and Demand Indexes

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Labor market indicators, including the unemployment rate, seem to have had only limited effectiveness for economic assessment recently. They have shown weak linkages with business activities, as illustrated by the positive correlation between the real GDP growth and unemployment rates from 2000 to 2016.

This paper assesses this phenomenon as being attributable to a disturbance of household labor supply–side effects. Labor market indicators are affected by labor demand, which is represented by business activities, and also by changes in households' labor supply behaviour. For instance, if negative effects such as worsening household income conditions work to strengthen the tendency of people of retirement age to remain in the labor market, employment may increase rather than decrease even when the economy is deteriorating.

In this regard, in assessing labor market conditions it is necessary to consider not only labor demand factors such as business activities, but also factors affecting household labor supply. The recent dramatic demographic changes and polarization of the labor market might imply that household labor supply conditions have also changed greatly. If these changes in household labor supply conditions overwhelm labor demand–side factors, the effectiveness of labor market indicators as economic barometers may be limited.

With this problem in mind, this paper uses the methodology of Barnichon and Mesters (2016) to classify labor market indicators into labor supply and labor demand indexes. After compiling statistics on labor mobility by gender

and by age group, this paper divides it into labor mobility caused for example by demographic changes (labor supply factors), and labor mobility resulting from general factors irrespective of gender and age (labor demand factors), to estimate its labor supply and demand indexes. This paper also calculates the unemployment rate with labor supply factors adjusted (LSFA), to examine its relationship with economic activities.

According to the results of estimation using Statistics Korea's monthly surveys on the economically active population from January 2000 to July 2017, labor supply has increased in almost all age groups except for the middle-aged male group, while labor demand has exhibited slower growth. Calculation of the unemployment rate with labor supply factors adjusted to reflect labor demand factors only (LSFA unemployment rate) shows this rate to have a strong correlation with economic activities, unlike the headline unemployment rate. Furthermore, the LSFA unemployment rate has been higher than the headline unemployment rate, and the difference between them has been widening recently. This gap seems attributable to demographic factors, including a fall in the proportion of the younger age group, in which there is more labor slack, and an increase in the economic participation rate of people of retirement age due to their delaying of retirements. It also seems to have stemmed from the contribution to labor supply from the rise in the potentially economically active population, including young applicants, rather than to growth in the number of unemployed.

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I. Introduction

II. Definition of Labor Supply and Demand

III. Assessment of Labor Market in Consideration of Demographic Changes

IV. Estimation of Labor Supply and Demand Indexes

V. Conclusion