Changes in Jobs for Women Attributed to Technological Development and Counter-Strategies (Ⅰ)

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This study is designed to forecast future changes in jobs for women attributed to technological development. We look into changes in existing labor markets for females, focusing on fluctuations in jobs for women as seen between 2001 and 2017 as basic data for identifying future trends in labor markets. The analysis results are as follows: First, we use employment data to review overall changes in the employment of women including women's degree of concentration in specific occupations, the diversity of occupations for women, gender differentials in wages and positions, and the characteristics of jobs whose risk of being replaced by automation is high or low. Second, relations between the level of vocational skill and jobs for women are examined via the US O'net data. To this end, changes in key skill factors for middle-skill occupations where women hold a majority and whose risk of going out of existence is high are compared with those in key skill elements for high-skill

jobs in order to look into issues in jobs for women and ways to improve policies for female human resources. Third, a Delphi survey of managers and professionals working for conglomerates and small and medium-sized enterprises (SMEs) where there are many jobs whose risk of being substituted by automation is high and low is conducted to find out digital conversions and a sense of crisis that they feel, as well as the direction of future changes in the number of jobs. The survey results make it possible to identify what companies worry about, as well as how they recognize issues in jobs for women. Lastly, Focused Group Interviews (FGIs) with business officials and employees are carried out to set up the basic framework for interpreting the Delphi survey results in more varied ways and analyzing more fundamental data. On the other hand, FGIs with employees and employers in connection with jobs for women in platform labor markets, which are considered as a new type of employment, are conducted to analyze future changes in demand for and supply of occupations for women. All these analysis results are generally pieced together to deliver appropriate policy measures. The following measures are presented. First, specific policies should be crafted to enable women to get high-skill jobs. Second, the government should help women benefit from work-life balance and overcome obstacles to their career development. Third, paradigm shifts in employment service should be encouraged through systematic vocational training and employment services for enabling women seamlessly change jobs. Fourth, platform labor markets should expand, strengthening social security systems. Fifth, the government should do its utmost to effectively react to digital conversions and reduce the gender gap, especially improving vocational training for middle-aged women.