

KWDI Issue Paper

Research Title: Study on the effect of active labor market policies on women's labor market

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The direction of active labor market policies to promote women's economic participation

Abstract

- ◆ South Korea's budget for active labor market policies (ALMPs) increased in 2021 by 59.4% from 2018. The numbers of both men and women participating in training and employment services decreased while that of those participating in direct job placement programs increased. This indicates that during the observation period, the focus of ALMPs shifted from promoting employability, which is a major goal of ALMPs, to providing labor costs by supporting direct employment.
- ◆ According to an analysis of the 2018-2019 employment insurance data, the impact of ALMPs on employment probability within six months was greatest among those who received all of training, job placement, and unemployment benefits; those who received both training and unemployment benefits; and those who received both training and job placement, in the order in which they appear. In terms of the impact on remuneration, the remuneration of the group with the combination of training and unemployment benefits was significantly positive. The results of the analysis of ALMPs for women were similar, but not consistent, to the results of the general analysis.
- ◆ We also used the 1990-2020 unbalanced panel data obtained from OECD Statistics in order to analyze the outcomes of ALMPs in OECD countries. In our findings, the impact of ALMPs on women's unemployment rates was not significant in terms of the total spending effect. However, employment services proved a significantly negative impact in regard to business-specific expenditures, confirming that employment services are more useful for women than are other programs.
 - 1) Personalized packaged support seems necessary given that 'package-style' ALMPs are more useful than individual policies in isolation.
 - 2) Policies only targeting job seekers may overlook some important issues, such as women's extended unemployment due to career disruptions. There should be activation policies that have broad policy goals.
 - 3) Since women constitute one of major vulnerable groups in the labor market, there needs to be labor market policies reflecting their vulnerabilities.
 - 4) With employment services proven to be useful in promoting women's labor participation, gender sensitivity should be integrated throughout the entire process of policy establishment and implementation.

<Table 1> The impact of policy participation on employment and remuneration (matched sample)

	Employed within six months		Employed within twelve months		Remuneration	
	Women	Total	Women	Total	Women	Total
Training	–	–	–	–	?	?
Job placement	+	+	+	+	–	–
Unemployment benefits	+	+	–	+	+	+
Training + Job placement	+(3rd)	+(3rd)	+(3rd)	+(3rd)	?	?
Training + Unemployment benefits	+(2rd)	+(2rd)	+(2rd)	+(2rd)	+	?
Job placement + Unemployment benefits	+	+	–	+	+	+
Training + Job placement + Unemployment benefits	+(1rd)	+(1rd)	+(1rd)	+(1rd)	?	–

<Table 2> The effects of ALMPs in OECD countries

	Model 1		Model 2	
	Women	Total	Women	Total
Unemployment rate (total), previous year	+	+	+	+
Inflation	?	–	?	–
Foreign direct investment	+	+	+	+
Log GDP (per capita)	–	–	–	–
GDP growth rate	–	–	–	–
ALMP spending (% of GDP)	?	?		
Employment service spending (% of GDP)			–	?
Training spending (% of GDP)			?	?
Employment incentive spending (% of GDP)			?	?
Direct job creation spending (% of GDP)			–	–
Start-up incentive spending (% of GDP)			+	+
Rigidity of employment protection laws (Version 1)	?	+	?	+
Unionization rate	?	+	?	?
Tax wedge	?	?	?	?
Total fertility rate	?		–	
Gender employment gap	?		–	
Gender wage gap	?		?	
Length of paid maternity leave	?		?	
Length of paid paternity leave	?		?	
Childcare facility utilization rate for 2-year-old and under	?		?	
Household spending	?		?	

Note: When targeting only women, family-related variables were used.

Research backgrounds and issues

- Amidst intensifying labor market volatility compounded by the Covid-19 pandemic, the importance of active labor market policies was highlighted more than ever in the past few years. Accordingly, the South Korean government has allocated increased funding and human resources to ALMPs.
- Among ALMPs, which were direct job creation, training, employment services, employment incentives, and start-up incentives, funding for (emergency) employment incentives and direct job creation have been increased due to the Covid-19 pandemic.

● In the face of an urgent need to address the impact of the pandemic on the labor market, the government inevitably expanded some of its labor market policies. In an attempt to respond to shifting labor market situations in the post-pandemic era, however, it is important to review existing policy responses and restructure labor policies for women.

- ▶ The employment service policy, which is said to have relatively positive outcomes, combines career counseling, training, job placement, and follow-up management. Its outcomes are largely affected by each component of the policy. Given that direct job creation programs (e.g. internship support) are closely linked to employment services (e.g. job placement), integrated policy approaches and analyses are critical.
- ▶ While there are programs specifically targeting women, including employment services for women with career interruptions, a significant number of women also participate in other labor market programs. This research will analyze the distribution and outcomes of existing policies and contribute to establishing policy directions in line with changing labor market conditions and labor demands.

● The goal of this research is to identify the link between women's participation in ALMPs and women's labor market and to suggest a desirable policy distribution scheme.

- ▶ This research also aims to analyze the effects of ALMPs in other countries on women's labor market, including area-specific outcomes and appropriateness of resource distribution, and identify its implications for South Korea.

Research findings

● The status of South Korea's ALMPs and its impact on women's labor market

- ▶ The status of South Korea's ALMPs
 - The total budget for ALMPs had a 58.7% increase from 19.2 trillion won in 2018 to 30.5 trillion won in 2021. In addition to ALMPs, there were expansionary government policies and labor market shocks caused by the pandemic during the same period.

<Table 3> Budgets for subsidized job creation programs

(Unit: 100 million won)

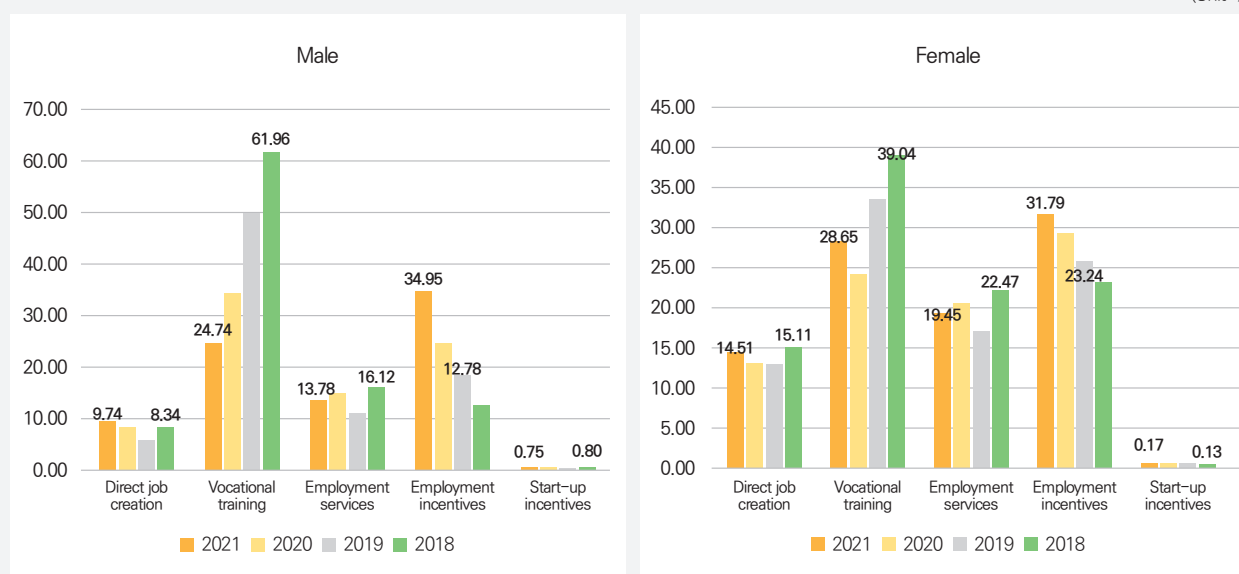
	Total	Direct job creation	Vocational training	Employment services	Employment incentives	Start-up incentives	Sustained unemployment benefits
2021	305,131	31,599	22,648	17,330	84,106	24,071	125,377
2020	254,998	28,587	22,434	11,994	64,950	23,585	103,447
2019	212,374	20,779	19,610	9,867	57,883	25,097	79,139
2018	192,312	31,961	20,645	9,354	37,879	24,475	67,998

Sources: The status of subsidized job creation programs; and the 2022, 2021, 2019, and 2018 budgets for subsidized job creation programs (The Ministry of Employment and Labor website).

- There was a gender difference in the changes in the proportion of participants by policy type. In the case of men, participation in training dropped from 62% to 24.7%. Meanwhile, participation in employment incentives rose from 13% to 35%.
- These findings indicate that the major trends of ALMPs have significantly changed over the past four years, with the focus of the policies shifting from the promotion of employability, which is a major goal of traditional ALMPs, to providing labor costs to support direct employment.

<Figure 1> Proportion of participants in ALMPs by gender

(Unit: %)



Sources: Measures to promote the efficiency of subsidized job creation programs (2018-2021), The Ministry of Employment and Labor (internal data); and the Employment Programs Analysis System (EPAS) (2018-2021) by the Korea Employment Information Service (internal data)

► The impact of ALMPs on women's labor participation

- For this, we used the 2018-2019 DW Employment and Labor Administration database (10% random sampling data) by the Korea Employment Information Service. In order to determine the employment effect of ALMPs, the logit regression model was used to analyze the probabilities of employment within six months and twelve months. Variables for participation in ALMP programs were categorized into eight types. Propensity score matching (PSM) was used to address possible selection bias.
- According to the logit analysis of employment probability within six months, the post-matching outcomes of participants in all ALMPs but training were greater than those of non-participants. The employment probability within six months was greatest among those who received all of training, job placement, and unemployment benefits, followed by those who received both training and unemployment benefits, and those who received both training and job placement.

- When only the female sample was examined, the employment probability within six months was greatest among those who received all of the training, job placement, and unemployment benefits, followed by those who received both training and unemployment benefits, and those who received both training and job placement. Participation only in training had a negative effect on employment probability within six months.
- Similar to employment probability within six months, the post-matching probability of employment within twelve months significantly raised the overall employment probability of participants. When analyzing only the female sample in regard to employment probability within twelve months, the effect of both training and job placement was relatively low compared to the entire sample. Interestingly, while the group that received only unemployment benefits presented a negative value unlike the entire sample, the negative effect disappeared when the unemployment benefits policy was combined with training or job placement. Comparing the odds ratio, the policy effect was lower for women than for the entire sample.

<Table 4> Employment within six/twelve months after loss of job in the matched sample

d_almph	Six months, total		Six months, Women		Twelve months, total		Twelve months, Women	
	Coef.	Std. Err.	Coef.	Std. Err.	Coef.	Std. Err.	Coef.	Std. Err.
Training	-0.421	0.044	-0.504	0.056	-2.612	0.023	-2.709	0.031
Job placement	0.083	0.015	0.062	0.019	-0.263	0.009	-0.252	0.012
Unemployment benefits	0.257	0.014	0.147	0.019	-0.932	0.007	-0.987	0.009
Training + Job placement	1.243	0.084	1.247	0.104	-1.382	0.034	-1.367	0.043
Training + Unemployment benefits	1.280	0.102	1.371	0.127	-0.733	0.043	-0.698	0.053
Job placement + Unemployment benefits	0.471	0.020	0.409	0.026	-0.731	0.011	-0.730	0.014
Training + Job placement + Unemployment benefits	1.449	0.123	1.411	0.141	-1.079	0.047	-1.009	0.055
Age	Controlled		Controlled		Controlled		Controlled	
Education	Controlled		Controlled		Controlled		Controlled	
Industry before loss of job	Controlled		Controlled		Controlled		Controlled	
Area	Controlled		Controlled		Controlled		Controlled	
Company size before loss of job	Controlled		Controlled		Controlled		Controlled	
Vocation before loss of job	Controlled		Controlled		Controlled		Controlled	
female	-0.135	0.011			-0.062	0.004		
_cons	-0.354	0.208	-0.188	0.321	-1.052	0.041	-0.720	0.079

Source: 2018-2019 DW Employment and Labor Administration database by the Korea Employment Information Service

► The impact of ALMPs on remuneration

- According to the analysis of the impact of ALMPs on remuneration using the matched sample, job placement was significantly negative, as in pre-matching, and unemployment benefits were significantly positive compared to those who did not participate in any policy type. The combination of job placement and unemployment benefits was significantly positive, and the combination of training, job placement and unemployment benefits was significantly negative for remuneration.
- Even with the matched sample, remuneration was significantly lower for women compared to that for men. It greatly decreased as the time between job loss and reacquisition is longer.

<Table 5> Remuneration after job reacquisition among policy participants in the matched sample

Inmpay_h2	Total		Women	
	Coef.	Std. Err.	Coef.	Std. Err.
female	-0.2470	0.0032		
Training	0.0056	0.0125	0.0104	0.0158
Job placement	-0.0820	0.0042	-0.0688	0.0054
Unemployment benefits	0.1344	0.0037	0.1300	0.0050
Training + Job placement	-0.0006	0.0154	-0.0023	0.0185
Training + Unemployment benefits	0.0282	0.0185	0.0424	0.0217
Job placement + Unemployment benefits	0.0272	0.0057	0.0432	0.0072
Training + Job placement + Unemployment benefits	-0.0567	0.0231	-0.0341	0.0265
Duration between loss and reacquisition	-0.0001	0.0000	-0.0001	0.0000
Age	Controlled		Controlled	
Education	Controlled		Controlled	
Industry before loss of job	Controlled		Controlled	
Area	Controlled		Controlled	
Company size before loss of job	Controlled		Controlled	
Vocation before loss of job	Controlled		Controlled	
_cons	13.7466	0.0816	13.6267	0.1145

Source: 2018-2019 DW Employment and Labor Administration database by the Korea Employment Information Service

- Overall, the results for women were not highly consistent, possibly due to heterogeneity among women and the 10% sample analysis.
- When policies are designed based on the results of the analysis, it is important to avoid attempting to create a one-size-fits-all model but to create the most suitable combination of policies meeting the unique needs of each target group based upon the consultations and support of field workers. In this regard, it is critical to strengthen the capacities and expertise of individual caseworkers.

The effects of ALMPs on women's labor market in OECD countries

► The effects of ALMPs in OECD countries

- We used unbalanced panel data from OECD countries to construct a 1990-2020 database. In the analysis of the impact of ALMPs on unemployment rates, the dependent variable was the unemployment rate, and the independent variables were the previous year's unemployment rate, macroeconomy variables, ALMP spendings, institutions, and women's labor market variables.
- The macroeconomy variables had a strong effect against unemployment rates but no significant effect as to the total expenditure on ALMPs. Inflation did not have a significant effect when only the macroeconomy variables was considered. However, its effect was very significant in the model that included the ALMP expenditure variables.
- In Model 2, in which the ALMP expenditure variables were analyzed by area, direct job creation and start-up incentives had a significant negative impact and a significant positive impact, respectively, on the unemployment rate. This shows that ALMPs have different effects on different areas.

- When it comes to institutions, the rigidity of the employment protection system, in addition to the ALMP expenditure and macroeconomy variables, exhibited a significant positive effect on the unemployment rate. In other words, the more rigid the employment protection system is, the greater the unemployment rate can be.

<Table 6> The effects of the ALMP expenditure, macroeconomy, and institution variables

unemp_all	Model 1		Model 2	
	Coef.	Std. Err.	Coef.	Std. Err.
Previous year's unemployment rate (Total)	0.8209***	0.0266	0.8056***	0.0265
Inflation	-0.1634***	0.0378	-0.1903***	0.0370
Foreign direct investment	0.0112*	0.0058	0.0112**	0.0057
Log GDP (per capita)	-3.8857***	1.0812	-4.9990***	1.1066
GDP growth rate	-0.2250***	0.0189	-0.2185***	0.0186
ALMP total expenditure (% of GDP)	0.5312	0.4239		
Employment services spending (% of GDP)			0.5197	1.7140
Training spending (% of GDP)			0.2844	1.1704
Employment incentives spending (% of GDP)			1.7386	1.1974
Direct job creation spending (% of GDP)			-3.9881***	1.1854
Start-up incentives spending (% of GDP)			12.456***	3.5912
Rigidity of employment protection laws (Version 1)	0.9285***	0.3422	0.5922*	0.3417
Unionization rate	0.0532*	0.0270	0.0211	0.0274
Tax wedge	-0.0075	0.0318	-0.0286	0.0321
_cons	39.7120***	12.1718	54.0249***	12.4627
sigma_u	1.6920		1.8149	
sigma_e	0.8375		0.8137	
rho	0.8032		0.8327	
R-sq:			R-sq:	
within = 0.8694			within = 0.8783	
between=0.7351			between = 0.7315	
overall = 0.7655			overall = 0.7639	

Source: OECD.Stat DB (1990-2020).

► The effect of ALMPs on women in OECD countries

- In terms of the effect of ALMPs on the total unemployment rate and women's unemployment rate, the effect of the total expenditure on ALMPs was insignificant. However, the effect was varied across individual spendings. Regarding the total unemployment rate, only direct job creation and start-up incentives were significant. As for women's unemployment rate, however, employment services demonstrated a very significant negative effect, indicating that employment services are highly useful for women.
- The institution effect was not significant. Model 2 had some effects of gender-related variables. Countries with relatively high fertility rates tended to have low unemployment rates for women. In addition, women's unemployment rate was low when the gender employment gap was wide. Neither gender wage gap nor the length of parental leave had a significant effect. Anglo-American liberal countries, social democratic countries in the Northern hemisphere, and continental European countries have both high fertility rates and high employment rates for women. When the gender employment gap is large, a low unemployment rate indicates that there are countries, like South Korea, where women are likely to be included in the economically inactive population rather than in the unemployed group.

<Table 7> The effects of variables on women's unemployment rate

	Model 1		Model 2	
unemp_f	Coef.	Std. Err.	Coef.	Std. Err.
Previous year's unemployment rate (Total)	0.6525***	0.0773	0.6063***	0.0728
Inflation	-0.0319	0.0685	-0.0574	0.0592
Foreign direct investment	0.0311**	0.0132	0.0290**	0.0118
Log GDP (per capita)	-7.7475***	2.6293	-10.4703***	2.3639
GDP growth rate	-0.1276***	0.0350	-0.1048***	0.0302
ALMP total expenditure (% of GDP)	-0.9412	1.0801		
Employment services spending (% of GDP)			-9.1632***	3.3218
Training spending (% of GDP)			1.3200	2.6915
Employment incentives spending (% of GDP)			3.0167	3.3407
Direct job creation spending (% of GDP)			-4.1642**	1.6761
Start-up incentives spending (% of GDP)			15.4785***	5.5201
Rigidity of employment protection laws (Version 1)	-0.8608	0.9537	-1.3061	0.8395
Unionization rate	0.0370	0.0676	0.0044	0.0650
Tax wedge	-0.0175	0.0748	-0.0628	0.0718
Total fertility rate	-1.8968	1.1521	-2.1772**	1.0632
Gender employment gap	-0.1226	0.0764	-0.1640**	0.0705
Gender wage gap	-0.0691	0.0497	-0.0146	0.0456
Length of paid maternity leave	-0.0133	0.0110	-0.0076	0.0094
Length of paid paternity leave	-0.0184	0.0212	-0.0264	0.0187
Use of daycare for two-year-olds or less	-0.0345	0.0243	0.0131	0.0264
Household consumption expenditure	0.0814	0.3879	0.0573	0.3481
_cons	94.1727***	30.0513	125.792***	27.1889
sigma_u	2.3728		2.9549	
sigma_e	0.7616		0.6464	
rho	0.9067		0.9543	
R-sq:			R-sq:	
within = 0.8869			within = 0.9242	
between = 0.6426			between = 0.5290	
overall = 0.6631			overall = 0.5591	
F(16,57) = 27.92			F(20,53) = 32.31	

Note: *** indicates that the data is significant at the 99% confidence level; ** at the 95% confidence level; and * at the 90% confidence level.

Source: OECD.Stat database (1990-2020).

- The impact of the macroeconomy variable was greater for women than for men, reaffirming that women are more vulnerable to labor market shocks. Given that ALMPs are one of the tools used to respond to such shocks, it is necessary to strengthen responses to women's labor market when macroeconomic variables change.
- Countries with high fertility rates, such as Anglo-American liberal countries, social democratic countries in the Northern hemisphere, and continental European countries, also tend to have high employment rates for women. The mere existence of a sound paternal leave system does not necessarily increase women's employment rate. According to this research, both women's employment rates and fertility rates are high in social democratic countries with the high utilization rates of such systems.

Policy suggestions

- ▶ The implications of this research are as follows:
 - Package-style ALMPs have better outcomes than do individualized ALMPs. Different combinations of ALMPs should be used and their outcomes be regularly reviewed in order to create policy packages catered to the unique employment needs of individuals.
 - Since government subsidies are usually directed to employers, it is necessary to evaluate if subsidy programs equally benefit men and women.
 - Vocational training is one of the important tools in ALMPs. Over the past four years, however, the rate of participation in training has declined despite an increase in expenditures on ALMPs. It is necessary to evaluate policies that result in disproportionate outcomes to men and women and address any structural problems.
- ▶ The direction of policies for women's labor market
 - This research has proved that women are more negatively affected by economic fluctuations and labor market shocks than are men, making women one of the major vulnerable groups in the labor market.
 - According to the analysis of the employment insurance database, those who were not covered by the employment insurance for a long time amounted to around 23% of economically active women and a significant number of them are women in their 30s and graduates of 2-year colleges. It is necessary to respond to their vulnerability to employment.
 - In the analysis of OECD countries, it was proven that public employment services can have positive effects for women. In both East Asian and East European countries, interestingly, women's unemployment rates are low but so are women's employment rates. This is because the proportion of women in the economically inactive population is high. Women's career disruption is a serious issue in South Korea. Since policies targeting job seekers have limited effects in preventing withdrawal from the labor market itself, it is necessary to widen policy goals with a focus on activation.
 - Labor market policies focusing on women's vulnerability should be prioritized. Sustained efforts are needed to pursue policies designed to address women's vulnerability in the labor market, such as 1) long-term unemployed individuals 2) disadvantages in employment and career development due to the gendered labor market structure, and 3) disadvantages in their efforts to strike a balance between family and work lives especially during pregnancy and parenting periods.
 - In addition, barriers that women face in labor market participation can be further addressed by including childcare and parenting support services in employment support packages.
- ▶ Strengthening gender sensitivity in employment services

- The incumbent government has sought to promote innovation in employment service policies through the “job seekers support package” and the “business support package.” Improving employment services is closely related to strengthening job safety nets, including training and unemployment benefits. Since policies are often provided in packages, the outcomes of individual policies are interdependent. It is important to identify and provide targeted support to vulnerable groups in the labor market.
- Gender-sensitive reviews should be incorporated across the entire process of policy implementation. In particular, long-term unemployed individuals may get systematically overlooked if they are not included as job seekers.
- When support systems are unduly focused on outcomes, it may obstruct the effort to sufficiently provide vulnerable groups with what they really need. The process of identifying target groups should be further sophisticated so that job seeker support packages effectively benefit those who really need them.
- The same goes for the business support package. It is necessary to establish a system in which areas of concern, such as gender gaps, are addressed in each stage of policy creation and implementation in order to maximize the impact of the program.
- The direction of policies moving forward should be established by reviewing the necessity, validity, and outcomes of women-specific policies. Enhanced support for vulnerable women should be provided through the faithful implementation of gender statistics for all government projects, as well as gender impact analysis and employment impact assessment for major policy projects with a focus on gaps in outcomes.

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Responsible Ministry : Ministry of Gender Equality and Family (Women’s Resources Development Division)

Related Ministries : Ministry of Employment and Labor (Enterprise Job Opportunity Support Division),
Ministry of Gender and Family (Career-Interrupted Women’s Economic Promotion Division)