

# A Study of the Effect of an Attractive Policy Instrument on Employment

– Focusing on Small & Medium Company Promotion Fund Support in  
Gyeongsangnam-do –

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‘일자리 위기’ 극복이라는 공감대의 형성과 함께 정부의 재정지원이 고용창출력을 제고하고 있는지에 대하여 검토해 볼 시점이라고 생각한다. 이에 본 연구는 경상남도 육성자금 지원이라는 유인적 정책도구를 통해서 고용에 미치는 영향을 분석하였다. 그 결과 육성자금 지원은 중소기업의 고용효과에 긍정적인 영향을 미치는 것으로 분석되었다. 자금유형별로 시설설비자금을 지원받은 사업체가 고용효과가 큰 것으로 나타났다. 그리고 자금규모별로 3억~10억 미만 사업체가 가장 고용효과가 있다고 인식하였다. 종사자수 측면에서는 시설설비자금을 지원받은 10~29인 사업체, 경영안정자금을 지원받은 30~49인 사업체에서 고용효과가 가장 크다는 의견을 제시하였다. 또한 업종별로 플라스틱 제품 제조업과 기타 업종을 제외한 전 업종에서 고용효과가 큰 것으로 나타났다. 마지막으로 지역권역별로 동부생활권에서 가장 고용효과가 큰 것으로 분석되었다. 연구결과를 바탕으로, 육성자금 지원을 통하여 고용효과를 증대시키기 위한 방안을 제시하였다.

**주제어:** 정책도구, 유인적 정책도구, 고용효과, 육성자금

## I. Introduction

The Korean economy was greatly weakened in the job creation ability as the so-called low growth and low employment structure became permanent together with slowdown in economic growth and degradation of effect on employment inducement while going through the economic crisis in 1997. In addition, the structural problem of the labor market began to appear. Furthermore, under the economic crisis that hit the world in the second half of 2008, the so-called

‘job crisis’ situation became more serious as domestic economy continued to cease making progress, and the enhancement of job creation ability was raised to national issue that needs to be addressed on a top priority.

It can be said that the legislation of employment impact assessment that was enacted in 2009 is the result of a broad and deep consensus on overcoming ‘job crisis’ formed regardless of government, political circles, the industrial world and the labor world. However, looking into a view that various areas of policy impact assessment(such as transportation, the environment, gender impact assessment, SOC preliminary feasibility study, etc.) has a legal basis already, the legal basis of the employment impact assessment was way overdue(Yun, 2010).

Basically, efforts from the private sector are prerequisite to improve employment creation ability of the economy, but the role of government is also important to induce improvement of employment creation from private sector through establishment and enforcement of employment friendly policy. Therefore, it is time to discuss enhancement of employment creation ability and reinforcement of employment-affinitive policy through assessment on ‘Small & Medium Company Promotion Fund(SMCPF)’ offered by Gyeongsangnam-do.

The project for SMCPF in Gyeongsangnam-do has been continued since 1993; this has been vitalizing the local economy and has been promoting job creation through a support for management stability fund and facility establishment fund aiming to relieve financial difficulties for small and medium company. This project has a significance to support the structural improvement together with healthy growth of small and medium companies in Gyeongsangnam-do and to foster small and medium companies with financial difficulty rather than blue chip companies.

There are many researches on the influences over business performance and efficiency by small and medium company funding(Gwak & Song, 2003; Kim, 2005; Gwon & Lee, 2006; Cho & Yang, 2007; Audit Research Institute, 2007; Chung, 2009; Roh, 2010; Lee & Cho, 2011) up to now. However, the studies that analyzed on influence factor of job creation by small and medium company funding support in the respect of policy tool are not sufficient. Hence, this study analyzes how SMCPF offered in Gyeongsangnam-do affects the employment creation in the respect of policy instrument. This analyzes the operational status of companies supported by SMCPF and effects of employment induction, and finds a development plan through identifying problems of support system.

## II. Background and Research Review

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## 1. Small & Medium Company Policy Funds

The SMCPFs has begun in earnest via establishment of SMCPF in 1980s. Now the SMCPFs is currently operating in 12 central government departments and each local autonomous entity including Small and Medium Business Administration. The goal of SMCPFs is to alleviate financial failure factors faced to small and medium company and accumulate business performance and credit information on small and medium company. The SMCPFs was introduced by the government to support small and medium companies that have a difficulty in financing from private financial institutions, so-called 'financial market-failure type'.

In fact, financing of small and medium company has a problem with asymmetries of information and for this reason, there is a high possibility of the imbalance between supply and demand due to bank's handling costs accordingly.

In case of Korea, financing difficulties for small and medium company have been chronic problems coupling with allocation structure of large company oriented financial resource and avoidance practices from bank's small and medium company financing(Lee & Cho, 2011).

The definition and scope of SMCPFs varies depending on the nature of the discussion, and it plays a role of financial service provider as a practical and direct type and includes credit guarantees, policy funds, on-lending and aggregate credit ceiling at the central level, and 'Local SMCPF' support at the local autonomous entity level(Lee & Cho, 2011: 5-9). First, Korea Credit Guarantee Fund, Korea Technology Finance Corporation and Regional Credit Guarantee Foundation support collateral supplement of small and medium company through credit guarantee and implementation of guaranteed debt. The scale of credit guarantee reached 67.5896 trillion won, based on the balance by the end of 2009, this was composed of 39.2494 trillion won for Credit Guarantee Fund balance, 17.1448 trillion won for Korea Technology Finance Corporation balance and 11.1954 trillion won for Regional Credit Guarantee Foundation balance per a breakdown. Second, the support of the policy funds by the central government is performed via Small and Medium Business Corporation. Small and Medium Business Corporation(SBC) uses proxy loan by SBC recommendation-bank loan and direct loan by SBC at the same time. Other departments including Small and Medium Business Administration(SMBA) are operating various financing support systems per support field utilizing the finance. Each department performs various supports for small and medium company through general accounting, special accounting and separate fund, and the support scale for small and medium company in a loan that has a strong nature to financial support business reached 764.3 billion won based on a plan in 2010. Third, there is

on-lending support method performed by Korea Finance Corporation(KOFC). Based on privatization fund by Development Bank, indirect support method that audit, enforcement and post management of private finance company can be utilized is realized. It can be said that interim support guideline falls in B~BBB rating less than 5 years of which support utilizing private funding is available in case of some credit guarantees. Furthermore, the financial company determines loan implementation and lending rate by judging the related small and medium company for a loan, and in this course, KOFC can support credit enhancement and securitization to relieve the burden of the financial company's risk. On-lending support has been practiced in 2009 as a pilot project level; a support plan for 2010 was 2.1 trillion won. Fourth, there is an aggregate loan limit as a credit line for the financial institution of the Bank of Korea. It is to lead the expansion of the lending for small and medium company of the financial institution through differential assignment of funds with low rate according to loan performance for small and medium company by each financial institution; this has been operating since 1994. This line is operating by the limit per regional headquarter assigned by each regional headquarter of the Bank of Korea considering the limit per financial institution assigned by each bank, loan performance of a bank for small and medium company in the province and regional economic situation, based on loan performance for small and medium company of the financial institution as to aggregate loan limit determined by Monetary Policy Committee of the Bank of Korea. The support scale is kept 10 trillion won based on the first quarter of 2010 and interest rate is generally maintained at 1.25% to 2%.

<Table 1> The General Status of the Policy Funds for Small and Medium Business Administration

Division	2005 year	2006 year	2007 year	2008 year	2009 year
Direct Loan	1,606,633	2,058,756	2,366,476	2,873,496	4,204,300
Indirect Loan	9,379,443	9,751,832	10,009,995	9,927,697	11,748,749
Subtotal	10,986,076	11,810,588	12,376,471	12,801,193	15,953,059

※ Source: Small and Medium Industry Promotion Corporation(2010).

## 2. Small & Medium Company Promotion Fund

The government has enacted 'Act to balanced local development and promotion of regional small and medium company' in 1994 to carry SMCPF systematically. With the enactment of this Act as a momentum, the promotion plan for regional small and medium company has been carried out in accordance with the regional characteristics as the central government has provided basic

instructions only and each metropolitan council has established and executed SMCPF independently since 1994.

The support project for regional small and medium company includes the promotion fund for regional small and medium company, support for Small and Medium Business Center, support for regional specialization item and special designation and support for small and medium company. SMCPF consists of the foundation and competitiveness enhancement project of small and medium company and the market re-development support project. First, the foundation and competitiveness enhancement project includes business start-up and restructuring project, support for management stability, regionally specialized item support project, local resident company support project in special support area and other business required by mayors, governors and SMBA. Second, the market re-development support project includes re-development and reconstruction to improve the competitiveness of the traditional market. The promotion fund support plan for regional small and medium company is established every year by local autonomous entity autonomically based on basic instructions for promotion of regional small and medium company and operating instructions for the promotion fund created and passed by SMBA to the local autonomous entity.

Gyeongsangnam-do divides SMCPF into the management stability fund and facility establishment fund, and supporting promotion fund to Blue Chip Company and small and medium company that has difficulties in the blind spot. First, the management stability fund refers to funds for R&D itself of new product and new technology development, productivity improvement, quality improvement and process improvement, funds spent for export promotion, funds spent for acquisition and maintaining of famous standard certificate and general working fund for other small and medium company management, whereas the management stability fund is operating for self-sustaining and international competitiveness improvement of small and medium company and it adjusts the support timing and its scale based on the trend of regional economy and financial situation, this has strength that may support the industry to foster first in the policy. Second, the facility establishment fund is used to support funds of new factory construction, extension and reconstruction, and additional facility to improve function and performance of existing facility. The facility establishment fund can be seen as the policy funds to support the lending with low rate for long term in order to adjust the industrial structure through modernization of production facility and facility change for regional small and medium company. That is, the management stability fund is the concept of the cost for conventional corporate management while the facility establishment fund is a 'productive' support that can act as long term investment for the company.

Looking into the trend of SMCPF offered in Gyeongsangnam-do from 2003 to June 30, 2011 present, the management stability fund supported 3,419 trillion won in total for 17,726 companies, and the facility establishment fund granted loan of 2,499 trillion won for 35,979 companies(Refer to Table 2). That is, Although the number of company that used the management stability fund is smaller than the number of the company that uses facility establishment fund, it was much larger in amount. And it was found that SMCPF offered by Gyeongsangnam-do was weighted towards the management stability fund.

<Table 2> Status of promotion fund support by Gyeongsangnam-do(Unit: EA, Hundred million won)

Item	Management stability fund				Facility establishment fund			
	Subtotal	2003~2009	2010	2011.06.30	Subtotal	2003~2009	2010	2011.06.30
Number of company	17,726	16,407	933	386	35,979	35,088	435	456
Amount	34,191	29,769	3,159	1,263	24,999	20,782	2,109	2,108

※ Source: Gyeongsangnam-do(2011).

Small and medium companies that form large axis of companies in Gyeongsangnam-do have their significant importance and role as they build the basis for the regional economy in a root of industrial development in Gyeongsangnam-do. Gyeongsangnam-do is devoting a lot of efforts making such as announcement of SMCPF support plan in every year by establishing SMCPF and enacting operation regulation. Especially Gyeongsangnam-do started to supporting SMCPF from 1994, and its results exceeded 500 billion won in 2011. For now, the study on the effect of employment by Gyeongsangnam-do's SMCPF is only one written by Kim(2008). However, the study by Kim(2008) shows an imperfection it does not focus on the effect of employment by promotion fund support but covers it only as a part of other economical effect.

### 3. Previous studies on the effect of attractive policy instruments for employment

Examining individual policies by grouping them as a policy instrument is a general ways to analyze the effect of policy. There are various concepts of policy instrument or government instrument but looking from definitions of previous studies integrated, we can say that it is a policy enforcement method used by the government deliberately to achieve the policy goal(Salamon, 2002; Howlett, 2005; Cheon, 2007; Cho, 2008). Seeing from the policy side, the policy

instrument means what kinds of method is used when the government implements a policy to support small and medium company and the related industry(Ryu & Kim, 2010). Most of studies that analyzed a policy for small and medium company by using policy instruments have divided the research manpower and funds by the type of policy instruments(Keizer, *et. al.*, 2002; Lin, *et. al.*, 2006; Hall & Bag, 2002; Shin & Choi, 2008).

In addition, McDonnel and Elmore(1987) have classified policy instruments into 4 types such as mandates, inducements, capacity building and system chaining in terms of intervention strategies by the government. Schneider and Ingram(1990) have classified them into 5 types—authority tools, incentive tools, capacity tools, symbolic or hortatory tools and learning tools, developed from McDonnel and Elmore(1987)'s opinion. Salamon(2002) said that policy instruments, as a tool of public action, were recognizable method through collective action structured to solve public problems. He has classified instruments into—directness, coerciveness, automaticity and visibility—based on 4 types of continuous level. All instruments presented by Salamon(2002) were 15 types such as government direct production, delegation to the private sector, subsidy, tax expenditure, voucher, financial assistance, government insurance, royalties, loans and loan guarantees. He has introduced subsidy, government loan, loan guarantee and government investment as a tool of incentive policy(Stanton, 2002; Han & Baek, 2008; Gwon & Park, 2009; Chung, 2011). First, subsidy means direct funding that is granted by the government to the company, household or other government for a public purpose. Second, government loan refers to a way that government lends funds with public funding to a certain individual or company and collects them directly. It provides more preferential condition than private commercial finance on the conditions such as normal interest rate and redemption period, and there is a difference from subsidy supplied free of charge on the condition that the full amount of principal and interest should be repaid after a certain period of time. Third, loan guarantee is a system that allows the borrower to get a loan from private lenders such as profit banks or mortgage lenders as the government guarantees to pay. The government guarantees in whole or in part for loan by making a contract, and if the debtor fails to repay, the government will pay as much as deposit instead. Fourth, investment is a way that the government finances some extent on the composition of the funds for policy purpose and invests directly or indirectly in the area that needs support.

Attractive policy instrument can lead target group basically to choose the most efficient policy, and the optimal policy compliance can be brought even if individuals of target group do not know the compliance function(Kim, 2008). We can say that Gyeongsangnam-do promotion fund corresponds to government loan among attractive policy instruments. Romer(1990) presented that

the government's subsidy, in other words, use of attractive policy instrument did not show across-the-board inclination in the impact on business performance. In general, like a study by Busom(2000) or Wallsteim(2000), studies that government's direct support improves the productivity and performance of the company usually feature. Lerner(1990) showed that a company that received the government's fund support grew faster than those that did not receive the support. That is, most of studies showed that the more attractive policy instruments were used, the more significant influences on performance of small and medium company existed. It seems that this will contribute to increase of job.

Until now, domestic studies related to government loan for small and medium company can be divided into a study on the effect of business performance by policy fund support(Gwak & Song, 2003; Kim, 2005; Cho & Yang, 2007; Audit Research Institute, 2007; Roh, 2010), a study on efficient operation of policy funds for small and medium company(Kim, 2005; Gwon & Lee, 2006; Chung, 2009; Lee & Cho, 2011), a study on actual condition survey of policy funds for regional small and medium company and performance analysis(Kim, *et. al.*, 2008; Cho & Shin, 2008), a study on the efficiency of a company which get a benefit from policy funds for small and medium company(Lee, 2006) and a study on the effect of guarantee support by Korea Technology Finance Corporation(Han & Roh, 2008). Specifically Kim, *et. al.*(2006) analyzed the effectiveness of policy funds by comparing financial performance of 7,154 small and medium companies that received policy funds with ones that did not get policy funds from 1994 to 2005 under Small and Medium Business Corporation. Lee(2006) analyzed relative efficiency and productivity trend after small and medium company received policy funds. As a result, it showed that a company which has larger number of employees and larger capital scale among corporate characteristics variables is interrelated with performance variables, as to industry sector, the support for the electricity sector had a high relation with performance comparing other sectors. Han & Roh(2008) have compared business performance between 664 companies that received technology finance from Korea Technology Finance Corporation and general small and medium companies from 2001 to 2006, and then analyzed the effect of finance support of Korea Technology Finance Corporation. Roh(2010) has analyzed support effects per year after small and medium company got policy fund support so he found that the profitability indicator, sales operating profit margin was significantly improved and policy fund support by direct loan had larger effect in the profitability than proxy loan by general bank. When it comes to growth indicator, sales growth, in case of founding fund, the support effect appeared only the first year after fund support therefore the need of continuous policy fund investment was suggested for the company's external growth. These studies have

contributed greatly to the efficiency in terms of cost and performance of small and medium company policy funds. However, effective studies that the policy fund support was regarded as one of policy instrument were not sufficient. According to a study by Shin(2010), the government has supported about 321.3 billion won to 674 companies from January 2010 and this led to employment creation for 7,887 people. But problems such as policy fund support to the company that had difficulty to create a job by new loan or to Blue Chip Company have been raised. Therefore for the direction of policy reform, he suggested that rigorous screening of the company which employment creation is available and new evaluation system that excludes a company which has low growth potential should be prepared.

This study is very suggestive in the respect of policy plan together with analysis on problem of the government support fund but there is a limit as it does not clearly explain the effect of job creation according to policy fund support. Therefore this study regarded the promotion fund support as an attractive policy instrument, and tried to find out the impact on the employment effects of small and medium company through actual condition survey.

### III. Research Design

#### 1. Analysis of the Target and the Range

The scope of this study is limited in companies that received SMCPF directly operated by Gyeongsangnam-do for last 3 years from 2008 to 2010. Based on the study by Korea Employment Information Service(2011), it utilized analysis results on employment effects of companies that applied and adopted promotion fund support separating from companies that failed to get promotion fund support during 2008-2010. The below table shows the status of company that received Gyeongsangnam-do's SMCPF(Refer to <Table 3>). Looking at the status of small and medium company that used promotion fund per year, there were 2,964 companies in total including 787 companies for 2000, 837 companies for 2009 and 1,070 companies for 2010.

<Table 3> Status of small and medium company that used promotion(Unit: EA)

Year	Management stability fund	Facility establishment fund	Total
2008	506	281	787
2009	606	231	837
2010	734	336	1,070
Total	1,846	848	2,694

#### 2. Analytical Methods

A survey via individual visit was conducted in 2,094 companies that received the support as the type of management stability fund and facility establishment fund from Gyeongsangnam-do. The survey period was for 25days from November 21 to December 16, 2011. Valid sampleis 427 companies that passed the verification process by collecting finally from 2,694 complete surveys. The actual conditionon investigation of SMCPF offered by Gyeongsangnam-do and the company's general and present condition were based on the source provided by Gyeongsangnam-do, and for the actual condition of support and employment effect, depth interviews were conducted by utilizing the structured survey source. Respondent of corresponding company or surveyee were limited to the person in charge of human resource management who directly manages and is well-informed of financial and manpower status or representative.

It was written in reference to actual condition survey in 'evaluation on employment effect of small and medium company promotion fund offered by Gyeongsangnam-do' of Korea Employment Information Service(2011).

### IV. Analysis Result

#### 1. General Information

From 2008 to 2010 the companies that used the management stability fund and the facility establishment fund among companies that received SMCPF offered by Gyeongsangnam-do formed 71.9% and 30.9% respectively, and the companies that used the management stability fund as well as the facility establishment fund together counted for 2.8%(Refer to Table 4). First, the distribution per company size took up 34.2% in case of a company less than 10 people hired and 42.2% in case of a company 10-29 people hired, 14.8% in case of a company 30-49 people hired,

8.9% in case of a company more than 50 people hired and more than 90% in case of a company less than 50 people hired. Second, the distribution per capital scale took up 19.4% in case of less than one hundred million won, 27.6% in case of less than one-three hundred million won, 36.8% in case of less than three-ten hundred million won, 11.9% in case of less than 10-20 hundred million won and 4.2% in case of more than 20 hundred million won in such a way that small company that has less than 10 hundred million won capital took up the majority. Third, the distribution per the industry took up 13.1% in case of other metal processing product manufacturing, 13.1% in case of general purpose machinery manufacturing, 13.6% in case of Special purpose Machinery manufacturing, so manufacturing part occupies the majority. Fourth, the distribution per zone took up 45.7% in case of eastern life zone(Gimhae, Yangsan, and Milyang), 48.2% in case of central life zone(Changwon, Masan and Gimhae), 1.6% in case of western life zone(Shancheong, Geochang, and Jinjoo) and 4.4% in case of coastal life zone(Geojae, Tongyoung and Namhae).

That is, as a result of survey, the company that used the promotion fund reflected mainly employment structure and employment actual condition of the company that used management stability fund in Gyeongnam manufacturing sector within one billion capitals with less than 30 people hired.

<Table 4> General and present condition of company using the promotion fund(Unit: EA, %)

Classification		Sample size	Importance
Fund type	Management stability fund	307	71.9
	Facility establishment fund	132	30.9
	Company using both funds above	12	2.8
Company size	9 people or less	146	34.2
	10-29 people	180	42.2
	30-49 people	63	14.8
	50 people or more	38	8.9
Capital scale	Less than one hundred million won.	83	19.4
	Less than 1-3 hundred million won	118	27.6
	Less than 3-10 hundred million won	157	36.8
	Less than 1-2 billion won	51	11.9
	More than 2 billion won	18	4.2

<Table 4> General and present condition of company using the promotion fund(Unit: EA, %)(continuously)

Classification		Sample size	Importance
Sector	Metal products for the structure, tank and steam generator manufacturing	23	5.4
	Other metal processing product manufacturing	56	13.1
	General purpose Machinery manufacturing	56	13.1
	Special purpose Machinery manufacturing	58	13.6
	Auto parts manufacturing	38	8.9
	Ship and boat construction	32	7.5
	Plastic product manufacturing	21	4.9
	Others	143	33.5
Life zone	Eastern life zone	195	45.7
	Western life zone	7	1.6
	Central life zone	206	18.2
	Coastal life zone	19	4.4
Total		427	100.0

## 2. Employment Information Analysis

Occupational structure of employment and employment fluctuation of a company that uses SMCPF provide critical information to assess the qualitative aspects of jobs created by the promotion fund(Refer to Table 5). At present in 2010, average number of regular employee per a company that uses the management stability fund is 22 people and most of them belong to small company below 30 people hired, and it has formed production-oriented employment structure as the workforce in production function and manufacturing technology sector among regular employees was 16 people and took up more than 76%. Also average number of regular employee per a company that uses the facility establishment fund is 24 people and most of them belong to small company below 30 people hired, and it has formed production-oriented employment structure as the workforce in the production function and manufacturing technology sector among regular employees was 16.3 people and took up 70% or so like the case of stability fund. A company that used the management stability fund has increased employees for 3 years but a company that used the facility establishment fund kept same number of employees in 2008 and 2009 and then increased in 2010. Its reason can be found somewhat in a study by Roh, Y. H(2010). As a small and medium company that received the promotion fund gives a positive effect in management improvement such as profitability, growth and stability, this is likely to contribute to job creation. Specifically it was analyzed that a company that received the facility establishment fund had higher employment creation effect of 3-4 people than a company that received the management

stability fund.

In other words, the facility establishment fund has higher employment creation effect than the management stability fund, but the facility establishment fund has a high possibility to show employment creation effect slowly due to fund characteristics as it spends in atomization of existing production facility.

Looking at manpower status per fund type and occupation, first, in case of a company that received the management stability fund, it was found that average number of person for research and development, sales & service and other manpower was about 1, one for planning and management was 2.3 and one for production function and manufacturing technology was 13-15. Second, in case of a company that received the facility establishment fund, average number of person for research and development, sales & service and other manpower was about 1 same as the management stability fund. In case of planning and management, average number of person was 3, which is bigger number than average in a company that received the management stability fund, and average number of person for production function and manufacturing technology was 14-16, which is bigger number than average in a company that received the management stability fund.

Table 5. Employment status of a company that uses the promotion fund(Unit: Person)

Classification		2008		2009		2010	
		Management stability	Facility establishment	Management stability	Facility establishment	Management stability	Facility establishment
1. Total workforce	Regular worker	18.5	21.3	19.5	21.3	20.7	24.2
	Non-regular worker	1.3	1.0	1.1	1.3	1.4	1.3
2. Research and development	Regular worker	0.7	1.1	0.8	1.1	0.9	1.1
	Non-regular worker	0.0	0.0	0.0	0.0	0.0	0.0
3. Planning and management	Regular worker	2.2	3.0	2.3	3.2	2.3	3.4
	Non-regular worker	0.0	0.0	0.0	0.0	0.0	0.0

Table 5. Employment status of a company that uses the promotion fund(Unit: Person)(continuously)

Classification		2008		2009		2010	
		Management stability	Facility establishment	Management stability	Facility establishment	Management stability	Facility establishment
4. Sales-Service	Regular worker	1.0	1.4	1.0	1.4	1.1	1.6
	Non-regular worker	0.0	0.0	0.0	0.0	0.0	0.0
5. Production function and manufacturing technology	Regular worker	13.8	14.0	14.6	13.9	15.7	16.3
	Non-regular worker	1.2	1.0	1.0	1.2	1.3	1.2
6. Others	Regular worker	0.8	1.7	0.8	1.7	0.7	1.7
	Non-regular worker	0.0	0.0	0.0	0.1	0.0	0.0

### 3. Analysis on employment effect of the promotion fund

The promotion fund contributed positively to employment expansion of the company, and the facility establishment fund gave more effects in employment expansion of the company than management stability fund(Refer to Table 6). Especially, a company that used the management stability fund had more effects in employment retention than employment expansion, and the facility establishment fund showed a similar effect on both employment expansion and employment retention. In addition, the employment expansion in a company that used the promotion fund was as greater as the company size was big; the employment decrease is as lower as the company size was small. Specifically the employment retention of management stability fund took up 78.9% in a company less than 9 people hired whereas it dropped to 48.3% significantly in a company more than 50 people hired, the employment retention of the facility establishment fund took up 60.6% in a company less than 9 people hired whereas it dropped to 18.2% significantly in a company more than 50 people hired. That is, the management stability fund was greatly beneficial for small company's employment retention, and the facility establishment fund was favorable for large company's employment expansion relatively. Furthermore the promotion fund per zone had

the largest employment effects in eastern life zone, and there was employment effect in central life zone equivalent to the average. This is closely related to the external context that affects policy instrument(Howlett, 2005). It seems that employment effect in eastern life zone(Gimhae, *et al.*) is high comparing with other life zones because there are Gimhae general industrial complex and Yangsan Sanmark industrial complex, etc. moved.

<Table 6> Employment effect of the promotion fund(Unit: Person, %)

Classification	Sample size	Employment expansion	Employment decrease	Employment retention
Management stability fund	307	33.2	5.9	60.9
Below 9 people	114	15.8	5.3	78.9
10-29 people	131	43.5	5.3	51.1
30-49 people	33	45.5	6.1	48.5
Above 50 people	29	41.4	10.3	48.3
Eastern life zone	142	36.6	4.2	59.2
Western life zone	4	25.0	0.0	75.0
Central life zone	143	31.5	7.0	61.5
Coastal life zone	18	22.2	11.1	66.7
Facility establishment fund	132	47.0	3.8	49.2
Below 9 people	33	33.3	6.1	60.6
10-29 people	56	58.9	0.0	41.1
30-49 people	32	34.4	3.1	62.5
Above 50 people	11	63.6	18.2	18.2
Eastern life zone	60	53.3	3.3	43.3
Western life zone	3	0.0	0.0	100.0
Central life zone	68	42.6	4.4	52.9
Coastal life zone	1	100.0	0.0	0.0

In order to analyze the job creation effect of the promotion funds, Korea Employment Information Service(KEIS)(2011) has classified the companies: the companies selected for promotion fund support is as a treatment group and the companies unselected for the promotion fund support is as a control group. And then KEIS analyzed the employment effects in order of time as after 1year( $t+1^{st}$  term), 2years( $t+2^{nd}$  term) and 3years( $t+3^{rd}$  term) term). As a result, when applying Difference in Difference(DID), average employment effect per company was 0.35 person in  $t+1^{st}$  term, 1.89 people in  $t+2^{nd}$  term, 2.49 people in  $t+3^{rd}$  term, so it was found that it was increased gradually as time went by. As result of estimated TEM analysis in phase 2 by using the equation estimates of probability in which SMCPF is used, the employment increased as time went by since the fund has been invested like the result of estimated TEM analysis in phase 2 by controlling endogeneity of variable on the use of fund when applying DID. Besides Gyeongsangnam-do promotion fund showed higher employment effect in the facility establishment

fund than one in the management stability fund(KEIS, 2011).

<Table 7> Analysis result of employment effect by TEM(Unit: Person)

Classification	$t+1^{st}$ term employment effect	$t+2^{nd}$ term employment effect	$t+3^{rd}$ term employment effect	
Applying simple DID( $\delta$ )	0.3529	1.8903	2.4917	
$E[Y_1 T=1] - E[Y_0 T=1]$	Average	0.5568	1.3071	
	Max	2.8671	2.2957	
	Min	-0.5429	0.7898	
Coefficients of dummy variable for approval (p-value)				
	$\iota$	-7.3049 (0.191)	-2.4814 (0.785)	1.9615 (0.840)
	$\alpha$	0.2962	0.0962	0.0025
		13.61	20.91	16.02

※ Note: The employment effect means difference in the number of regular employees with application year of SMCPF(t point).

※ Source: KEIS(2011).

In order to analyze the employment effect of promotion fund more specifically, the employment effect in case that the promotion fund was not supported was also analyzed(Refer to Table 8). The results showed that the promotion fund affected employment fluctuation with 35.5% of the company as responses saying changes of the existing workforce would not existed reached 65.8%. 26.9% of the surveyed companies responded that “while maintaining employment, other measure such as wage cut would be taken” and 7.3% answered that “layoffs would be carried out”. Furthermore 40% of companies that used the management stability fund responded that employment decrease and wage cut would be taken if they could not use the promotion fund. That is, it showed that the companies that used the management stability fund were more sensitive in linking the promotion fund with employment fluctuation comparing with companies that used the facility establishment fund. Only companies more than 50 people hired showed high response proportion said that employment decrease and wage cut would be taken if they could not get the promotion fund support, it can be inferred that this is employment prospect when companies more than 50 people hired do not use the management stability fund.

<Table 8> Employment outlook under no support of promotion fund(Unit: EA, %)

Classification	Sample size	Employment decrease	Employment retention and wage cut	Employment retention
Management stability fund	307	8.8	29.3	61.9
Facility establishment fund	132	3.8	22.7	73.5
Below 9 people	146	8.2	19.9	71.9
10-29 people	180	5.6	34.4	60.0
30-49 people	63	3.2	22.2	74.6
Above 50 people	38	18.4	26.3	55.3
Total	427	7.3	26.9	65.8

It showed that companies which used the promotion fund offered by Gyeongsangnam-do the most preferred “when applying the promotion fund, present employment objectives, and if companies exceed it, cut the interest rate or give additional support” and “allow duplicable support” to boost the employment effect(Refer to <Table 9>). However, it showed that they recognized differently depending on fund types. The companies that used the management stability fund were interested in interest rate cut and additional support method in exceeding employment objective, but the companies that used the facility establishment fund had more interest in duplicable support of both the management stability fund and the facility establishment fund.

<Table 9> Plans to increase the employment effects(Unit: EA, %)

Classification	Allowed duplicable support of promotion fund for both the management stability fund and the facility establishment fund	Interest rate cut and additional fund support in exceeding employment objectives for the promotion fund	Mitigation of loan repayment condition when 3% additional employment among vocational trainees employed	Others
Management stability fund	38.8	50.5	8.8	2.0
Facility establishment fund	54.5	39.4	4.5	1.5
Total	43.6	47.1	7.7	1.6

The project for SMCPF support offered in Gyeongsangnam-do has been continued since 1993; this vitalizes the local economy and promotes job creation by relieving financial difficulties of small and medium company. We can say that the basis for the existence of the promotion fund lies in small and medium company support service that is only possible in public area and difficult to expect to private bank. The important role of the promotion fund is service provision avoided in private sector such as long-term lending period, low lending rate compared with private financial institutions and credit loan for a company that has low credit and no credit ranking based on the growth and technique(Roh, 2010). It analyzed what these promotion fund supports impact on job creation of small and medium company. The result of positive analysis showed that attractive policy instrument-the promotion fund gave positive effect in employment effect of small and medium company. Especially, companies that used the management stability fund had greater effects in employment retention than employment expansion, and the facility establishment fund affected in the employment expansion and employment retention in a similar way. In addition, employment expansion of companies that used the promotion fund was as higher as the company size was big; employment decrease was as lower as the company size was small.

To increase the employment effect through the promotion fund support for small and medium company, a plan that presents the employment objectives when applying the promotion fund and then cuts interest rate or gives additional support if objective is achieved should be taken into consideration. That is, it presents strategy by extending flexibly the loan limit and redemption period via linking the promotion fund with employment creation. The result of survey analyzed that the company which used both management stability fund and the facility establishment fund had great employment effect. Therefore when the promotion fund supports, selection and concentration on specific companies or industries are required. If you want to increase employment effect by putting practically the facility establishment fund, it can be granted that the management stability fund supports together. However, in case we have to consider the benefits of a number of companies under budget constraints, and actually such a progress is necessary, we can fall into the trap of budget constraints because it is inevitable that the employment effect per company is likely to be lower. Therefore the system which the group of local experts constantly monitors and advises should be established to distribute efficiently the management stability fund and the facility establishment fund within the budget constraints.

The following measures should be considered to carry direction for employment expansion in SMCPF by Gyeongsangnam-do(KEIS, 2011). First, a measure for operation of SMCPF that can be operated in a matching fund way should be considered in the long term. Now SMCPF is

V. Conclusion and Implications

supported only if the company's sales and capital reaches in a certain level, but there is a need to increase the convenience to allow the promotion fund use any time if a company wants to use it. In addition, if facilities funding support for production facility or process improvement requires the company's matching fund constantly, it is expected that the employment effect could further increase. Second, Gyeongsangnam-do should find ways to improve the job quality and develop employment performance index that is capable of controlling the relation of small and medium company promotion with employment creation systematically. That is, the development of post employment performance index which manage the employment performance of SMCPF systematically is needed and the means of a tool that manage the quality of the job newly created is required. Especially, we need to come up with measures to strengthen the link of SMCPF by developing prior regulatory provision or post evaluation index of job creation focusing on foreign workers. Third, we have to consider a way that presents employment objective when applying the promotion fund and then cuts interest rate or gives additional support if objective exceeds. At present, in case of the management stability fund, excellent company on job creation is given preferential treatment in 3.0% second preservation rate annually and in case of the facility establishment fund, in 3.5% per year. Therefore we must prepare a plan that raises the prime rate or enlarge its scope so extend the loan limit and redemption period for a certain time.

This study was meaningful as it analyzed how attractive policy instrument—the promotion fund support—impacted on the company's employment effect. But there was a limit because it analyzed only for 3 years due to limitation of source on employment effect by the promotion fund support and it was limited to perception survey of companies. It is expected this study will give a chance to accumulate more empirical researches about how attractive policy instruments influence on the employment effect in the future.

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## A Study of the Effect of an Attractive Policy Instrument on Employment

– Focusing on Small & Medium Company Promotion Fund Support in Gyeongsangnam-do –

Soung Wan Kim, Moo Hyeon Joo

This study reviews whether financial support from a government considers job creation ability as overcoming the 'job crisis' via a bond of sympathy. To do this, the study analyzed the effect of an attractive policy instrument on employment through an investigation of the small and medium company promotion fund support offered in Gyeongsangnam-do. The analysis result revealed that promotion fund support had a positive effect on employment at small and medium companies. Regarding the fund type, and the company, to which the company who received fund was given, a major employment effect was noted. Concerning the fund scale, companies who received funding in the amount of KRW 0.3~1 billion reported an employment effect. Regarding the number of staff members, the companies with 30~49 such members, to which management stabilization funding was provided as well as companies with 10~29 staff members who also received funding which reported an employment effect. For industry, all industries excluding plastic product manufacturing and other industries showed a major employment effect. Finally, regarding local areas, it was found that the employment effect was high in eastern areas. On the basis of the results of this study a method to increase the employment effect through promotion funding is suggested ultimately to increase overall employment.

**Key words:** policy instrument, attractive policy instrument, employment effect, promotion fund.