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For Inquiry: KLI International Cooperation & Information Office
Address: 370, Sicheong-daero, Sejong-si, 30147, Korea
www.kli.re.kr/kli_eng

Author(s): Sang-Bong Oh

Reform of the Employment Retention Subsidy Against COVID-19*

Sang-Bong Oh**

I. Introduction

Since the COVID-19 outbreak, Korea has been undertaking a strong social distancing campaign, which has severely affected small self-employed businesses and travel agencies most of which are based on face-to-face services. As COVID-19 spread rapidly from China to Europe and the U.S., manufacturing industries are also suffering, since they source raw materials or sell their finished goods through the global value chain. The impact of COVID-19 that is manifesting across all industries will inevitably have an adverse impact on the labor market. There are three main policy responses to the crisis: ① Retaining pre-crisis level of employment; ② Strengthening unemployment protection within the existing social safety net; and ③ Protecting unemployment that exist outside the social safety net. However, where the external labor market has essentially disappeared, the employment retention policy is placed as a priority labor market policy. This is the main reason to why major countries are implementing employment retention measures. This paper will focus on employment retention subsidies as an employment retention policy tool.

Few studies in Korea have analyzed the effectiveness of the employment retention subsidy.[1] However there have been a number of such studies on short-time work in other countries, conducted after it was touted as contributing to employment security during the 2009 global financial crisis. Cahuc (2019)[2] assessed that short-time work has been consistently observed to meaningfully

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** Research Fellow (soh@kli.re.kr).
1) Studies in Korea include: Hanam Phang et al., (2007), "In-depth Evaluation of Employment Insurance Programs," Ministry of Employment and Labor; Joo-seop Kim et al., (2001), "Employment Retention Program: Effectiveness and Improvement," Korea Labor Institute; and Dong-heon Kim & Eui-gyeong Park (2000), "Evaluation of Efficiency of Employment Retention Subsidy," Korea Labor Institute.
2) Cahuc, Pierre (2019), "Short-time work compensation schemes and employment," IZA World of Labor.

contribute to employment security during economic contractions. However, at the same time points out that labor mobility to more efficient sectors are deterred and outsiders' employment opportunities are reduced. Based on these research results, it can be expected that employment retention subsidies will be an efficient tool to ensure labor market stability in Korea during the COVID-19 crisis. Due to the fact that the COVID-19 crisis impacts the national economy, not only for certain businesses, the deterring factors would not likely be of concern in Korea. When jobs are lost across the entire economy, this means that there is little chance of labor moving to more efficient sectors and that outsider's employment will be insider's loss of jobs. In short, during the COVID-19 crisis it appears necessary to maximize use of employment retention subsidies with a focus on employment retention.

This paper first reviews how Korea's employment retention subsidy was revised since the COVID-19 outbreak and examines the reforms and introductions of the employment retention measures implemented by four countries. Finally through a comparison of other countries, implications for how Korea's employment retention subsidy should be used during a time of severe shock within the labor market will be suggested.

II. Reform of Korea's Employment Retention Subsidy

1. Overview of the Employment Retention Subsidy: Before COVID-19[3]

Employment retention subsidies are financial support provided to employers who take employment security measures such as business shutdown or leave of absence when employment adjustment has become unavoidable due to business downsize, shutdown or conversion as a result of economic cycles or structural changes. It is also provides support for employees that have seen substantial wage cuts as a result from employers taking these measures (Paragraph 1, Article 21, Employment Insurance Act). In other words, employment retention subsidies incentivize retention by reducing financial burden and enhancing the effectiveness of employers' retention measures by preventing unnecessary job turnover of employees who are paid a majority of the wage that was lost from employment retention measures.[4]

Support for employers are provided either when they reduce over 20% of the total working hours, giving monetary compensation for the lost wages to employees, or also when paid leave has been provided for over a month. The amount of subsidies are ½ - ⅔ of the employer's monetary compensation for the insured employees' wage. The maximum subsidy amount is the same as the maximum unemployment benefit payment. The maximum duration for support is 180 days out of a year. When it is deemed necessary for employment security, for example the hike of unemployment, the subsidy amount can be adjusted from ⅔ to ¾ for up to 1 year designated by the Ministry of Employment and Labor. Employment adjustment being 'unavoidable' means the situations when inventory increases or production/sales decrease, changes in ways of working lead to business downside or manpower reduction or when recognized by the head of Employment Services. 'Reducing over 20% of total working hours' means that total working hours in the month when employment retention measures are taken is over 20% less than the monthly average for the quarter that was two quarters past (4~6 months ago).

Support to employees are provided to workers whose av-

3) Refer to Ministry of Employment and Labor (2020), "Employment Incentive Support Program" and "Employment Retention Subsidy."
4) For the purpose of this study, "employment retention" means retaining employees who are covered under Employment Insurance. All subsidies for this purpose are provided out of the Employment Insurance Fund paid in by labor and management.

erage wage fell by over 50% due to unpaid shutdown or unpaid leave. Unpaid shutdown is when the employers facing inevitable employment adjustment pay the shutdown allowance less than 50% of the lost wage to a certain percentage of employees over 30 days under approval from the Labor Commission. Unpaid leave is when the employers pay the leave allowance less than 50% of the lost wage to a certain percentage of employees over 90 days under the agreement with the workers' representative after 3 months of shutdown paying more than 70% of the average wage. The amount of support is determined by the review committee within 50% of average wages, taking into consideration of wage and allowances paid by employers. The maximum amount is the same as the maximum unemployment benefit payment, and the maximum duration for the one unpaid shutdown or one unpaid leave is 180 days. 'Inevitable' employment adjustment is when inventory significantly increase, production/sales fall sharply or when recognized by the head of Employment Services.

However eligibility for support, as well as the amount and duration are subject to different rules according to Paragraph 3, Article 21 of the Act. Business sectors that are specially designated and businesses for whom over 50% of the revenue are related to the specially designated sectors are all subject to different standards on support requirements, level of support and duration of support.

2. Revision of the Employment Retention Subsidy in Response to COVID-19

Since the onset of COVID-19, the first action taken by the Korean government was to allow more flexibility regarding eligibility for subsidy regarding paid shutdown or paid leave, strengthen subsidy to employers and expand businesses specially designated. In order for employers to be eligible to receive paid shutdown/leave subsidies, there should be considerable increase in inventory or reduction in production or sales. However after COVID-19, it had been announced that application of the existing rules will be of discretion to the head of Employment Services.[5] In addition, at the discretion of the Minister of Employment and Labor, the government's financial support for shutdown and leave allowance increased from 2/3 of the allowance (1/2 for large companies) to 3/4 (2/3 for large companies).[6] Following the announcement, the travel and tourism, tourism hotels, tourism transport and performance industry were additionally included as specially designated businesses as of March 1st.[7] Upon designation as a specially designated business, up to 9/10 of the allowance is subsidized (2/3 for large companies, or 3/4 if total working hours are reduced by over 50%). If the maximum amount of subsidies increase from 66,000 won to 70,000 won (66,000 won for large companies), and the required duration of paid shutdown and leave for the unpaid leave is reduced from 3 months to 1 month and from 3 months to 30 days.

In March, with the deterioration of labor market indicators, the government followed up with additional measures to increase incentives for employers to provide paid leave to employers. On March 25, it was announced that the subsidies for employers who are entitled to preferential support will increase from 3/4 of the allowance to 9/10 from April to June.[8] 9/10 is equivalent to the level of support provided to specially designated businesses.

The last action taken by the government was to newly put in place a 'fast-track program for unpaid leave sup-

5) Ministry of Employment and Labor, "Employment Retention Subsidy for Businesses affected by COVID-19," press release, 2020.2.10.
6) Ministry of Employment and Labor, "Active Employment Security Support to be Implemented in Response to COVID-19," press release, 2020.2.28. This document includes the decision to apply a higher amount for 6 months from Feb. 1. It also revealed that Specially designated industries were being considered for industries that are especially affected, like tourism.
7) Ministry of Employment and Labor, "Notification on the Designation of Tourism, Performance Industry, etc. as Specially designated Industries," press release, 2020.3.16. As of the end of Jan., there are 13,845 establishments and 171,476 workers in 4 sectors (Employment Insurance DB).
8) Ministry of Employment and Labor, "Up to 90% in employment retention subsidy to be supported to all sectors for the first time ever," press release, 2020.3.25. This action was institutionalized on April 21 by amending the enforcement decree.

<Table 1> Revision of the Employment Retention Subsidy after COVID-19

		Before COVID-19	After COVID-19
Employer Support	Criteria for Inevitable Employment Adjustment	- Inventory: 50% increase from previous year's monthly average, or on increasing trend from the monthly average of the two previous quarters; - Production or sales: 15% reduction from the monthly average or the same month of previous year, or from the monthly average of the three previous months, or on downward trend from the monthly average of the two previous quarters; - Business downsizing or changes that lead to manpower reduction; - Recognized by the head of Employment Service	It will be more actively applied for cases recognized by the head of Employment Services, so that businesses that have seen operations (partially) suspended due to COVID-19 can be recognized as a workplace with inevitable employment adjustment without proof of inventory, production or sales.
	Support Criteria (Shutdown)	Total working hours reduced by over 20%	
	Support Criteria (Leave)	Granting over one month of leave	
	Amount of Support	2/3 of allowance in cases of preferential support; 1/2 of allowance for large companies (2/3 if reduction is by over 50%); Daily maximum is 66,000 won (equal to daily maximum of unemployment benefit)	3/4 for preferential support (Feb.-Mar.) → 9/10 (enforcement decree amendment, Apr.-June); 2/3 for large companies
	Support Duration	180 days out of one year	
Employee Support	Reasons of Inevitable Employment Adjustment	- Inventory: 50% increase from previous year's monthly average, or over 20% increasing trend from the monthly average of the previous two quarters; - Production or sales: 30% reduction from the monthly average or the same month of previous year, or from the monthly average of the previous three months, or on over 20% downward trend from the monthly average of the previous two quarters; - Recognized by the head Employment Services	It will be more actively applied for cases recognized by the head of Employment Services, so that businesses whose operations were (partially) suspended due to COVID-19 can be recognized as a workplace with unavoidable employment adjustment without proof of inventory, production or sales.
	Support Criteria (Shutdown)	Employees whose wage has been reduced by over 50% as a result of the company going into over 30 days of shutdown while paying less than 50% of shutdown allowance to over a certain percentage* of employees with approval from Labor Commission	
	Support Criteria (Leave)	Employees who are on unpaid leave when the company, after granting over 3 months of paid shutdown (over 70% of average wage) within the past one year, gives over 90 days of unpaid leave to over a certain percentage** of employees in agreement with workers' representative	Fast Support Program to be temporarily established. In this case, requirement of over 3 months of paid shutdown is relaxed to paid shutdown for more than 1 month (enforcement decree expected to be revised)
	Amount of Support	Less than 50% of average wage (determined by the review committee)	Fast Support Program : 500,000 won per month for 3 months
	Support Period	Up to 180 days	
Specially Designated Industries for Support	Applicable Businesses and Regions	Shipbuilding	4 additional sectors designated (travel and tourism, tourism hotels, tourism transport, performance, for 6 months from Mar.16) + aviation ground operations, duty free business, exhibition/ international conferences, airport bus to be additionally designated (will announce notification at the end of April)
	Amount of Employer Support	9/10 for preferential support companies, 2/3 for large companies (or 3/4 if the reduction is by over 50%); daily maximum is 70,000 won for preferential support companies and 66,000 for large companies	

<Table 1> Continued

		Before COVID-19	After COVID-19
Specially Designated Industries for Support	Employee Support Criteria (Leave)	Employees who are on unpaid leave when the company, after granting over 1 month of paid shutdown (over 70% of average wage) within the past one year, gives over 30 days of unpaid leave to over a certain percentage of employees in agreement with workers' representative	Fast Support Program to be temporarily established. In this case, requirement of over 1 month of paid shutdown is relaxed to 'immediately' (Notification is to be revised)
	Employee Support Amount (Leave)	Less than 50% of average wage (to be determined by the review committee)	Fast Support Program : 500,000 won per month for 3 months

Notes : *) A certain percentage: 50% out of fewer than 20 employees, 10 employees out of 20-99, 10% out of 100-999, and 100 out of 1000 or more employees.

**) A certain percentage: 10 employees out of fewer than 100 employees, 10% out of 100-999, 100 out of 1000 or more employees. This means businesses with fewer than 10 employees cannot apply for unpaid leave. Those on an unpaid leave from companies with fewer than 10 employees can utilize the emergency COVID-19 employment security support.

port' that simplifies the application process and to expand specially designated industries.[9] While 3 months of paid shutdown were needed for general businesses, and 1 month for those in specially designated industries, the duration was immediately reduced to 1 month respectively. And the subsidy amount was fixed at 500,000 won.[10] The new specially designated industries will be airline, ground operations, duty free businesses, exhibition/international conferences and airport buses among others.[11]

3. Changes in Employers' Labor Cost Burden from Revision in Employment Retention Subsidies

When applying for paid shutdown/leave subsidies[12] employer's that are subject to preferential support must bear the remaining 1/3 of the allowance (after the government subsidy) and the employer's portion of social insurance contributions. If 2/3 of the allowance exceed the daily maximum of 66,000 won in government subsidies, the excess amount should be borne by the employer. However, after revision employer's burden decreases from 1/3 to 1/10 of the allowance. The social insurance payments and the daily cap of government subsidies of the allowance remain the same. The reduced costs borne by the employer on allowances are expected to reduce employer's burden and thus contribute to increasing applications on employment

<Table 2> Changes in Employers' Labor Cost Burden after Revision of the Employment Retention Subsidy (excluding wage for actual hours worked)

	Before COVID-19	After COVID-19
Preferential Support	1/3 of shutdown/leave allowance (up to daily max.) + excess of daily max. shutdown/leave allowance + employer's share of social insurance contributions	1/10 of shutdown/leave allowance (up to daily max.) + excess of daily max. shutdown/leave allowance + employer's share of social insurance contributions
Large Companies	1/2 or 1/3 of shutdown/leave allowance (up to daily max.) + excess of daily max. shutdown/leave allowance + employer's share of social insurance contributions	1/3 of shutdown/leave allowance (up to daily max.) + excess of daily max. shutdown/leave allowance + employer's share of social insurance contributions
Specially Designated Industries (Preferential Support)	1/10 of shutdown/leave allowance (up to daily max.) + excess of daily max. shutdown/leave allowance + employer's share of social insurance contributions	No changes
Specially Designated Industries (Large Companies)	1/3 or 1/4 of shutdown/leave allowance (up to daily max.) + excess of daily max. shutdown/leave allowance + employer's share of social insurance contributions	No changes

9) Joint ministerial meeting, "Measures for employment and business stabilization against job crisis," 2020.4.22.

10) As the announcement was that the fixed amount of 500,000 will be given only for three months, the relaxed requirements are also expected to last three months, but it is a point that requires revision of the enforcement decree and thus can be confirmed after the revision is made.

11) The announcement stated that employees of agency that mainly engage in aviation ground operations will also be supported similarly to special employment types, but the support in this case does not appear to be for shutdown allowance.

12) Unpaid shutdown/leave are not part of the discussion in this study as they cause little burden on the employer.

retention subsidies. Despite these revisions, the burden on employers on allowance still remains as well as the burden on social insurance. In addition, as mentioned in the Appendix, the fixed daily cap in result, reduced the effect of increased government support subsidies.

III. Revision of Employment Retention Programs in Other Countries

1. Germany

Since the rapid spread of COVID-19 in March, Germany came up with strong administrative measures such as forced business closures. The direct impact of COVID-19 and government actions resulted in a sharp contraction in the labor market. As a response, the German government set employment retention as a top priority of labor market policies and revised the Kurzarbeit (hereinafter "short-time work scheme") in order to encourage employers to retain their workers.

The German short-time work scheme is similar to Korea's paid shutdown support under the employment retention subsidy, where reduction in working hours are allowed up to 0 hour. However the two programs differ in details. The shutdown allowance is provided by the government, not the employer. If businesses apply for short-time work allowance, the reduced portion of employees' wages (hereinafer "wage loss") will be paid by the government up to 60% (workers with no children)/67% (workers with children) to be delivered immediately to the employees. The actual amount that the government provides is 60/67% of net wage loss. The net wage loss is the wage loss minus social insurance contributions and taxes. Social insurance or taxes are not imposed on the allowance. This creates problems of workers receiving less social insurance from wage loss derived from lower contributions. However social insurance entitlement is maintained by having the employer pay the full amount of social insurance contributions (pension and health insurance) on a fictitious wage that is calculated as 80% of the wage loss. The social insurance contribution that the employer pays is equivalent to 30% of the wage loss. Allowance is paid up to 60/67% of 6,900 (Western region)/6,450 (Eastern region) euros which is the maximum employment insurance benefit. Despite the reduction in working hours, if wages are above the employment insurance limit of 6,900/6,450 euros, then no subsidies are provided. 60/67% of 6,900 euros is 4623.0/4321.5 euros.

There have been a number of changes in response to COVID-19, two of which that is important was easing requirements in order to claim for allowance and reducing employers' burden for business shutdown. One explicit change in requirement was from "over 10% reduction in wage among over 30% of all employees" to "over 10% reduction in wage among over 10% of all employees."[13] When applying for allowance, the employer has to pay the full amount of social insurance contributions for wage loss (equivalent to around 30% of wage loss) but the employer's burden was essentially eliminated by the new plan due to all employers' social insurance contribution payments being refunded until the end of 2020. Another change in institution was allowing dispatched workers to receive allowance.[14]

2. France

France has been more severely affected from COVID-19

13) To apply for the allowance, a certain part of the employees' wage must have been reduced for unavoidable causes such as the economic conditions. "Unavoidable" means that such outcome could not be helped despite efforts to prevent significant wage cuts to a significant percentage of its employees. Although this criteria was not explicitly changed since COVID-19, it has been presumably eased to a certain degree.

14) Such efforts by the government to retain employment are believed to be highly important in stabilizing the labor market. As of April 26, 751,000 companies have applied for the allowance, for nearly 10.1 million workers. This is close to 3 times the 3.3 million workers who received the allowance during the 2009 global financial crisis.

than Germany, and its labor market also appears to have had an enormous impact. As such, France has undertaken even stronger measures than Germany to encourage employment retention by setting it as the utmost priority in its labor market policies.

The country's program for employment retention, Activité Partielle (hereinafter "short-time work scheme") is similar to Korea's paid shutdown allowance. If a struggling business pays an allowance (indemnity) that is at least 70% of the wage loss to its employees, the government will provide compensation in part to the employer. The allowance that employers provide to employees should be at least 8.03 euros per hour. Social insurance is not imposed on the allowance that employees receive. Then government subsidizes the employer for the allowance paid to the employeed. For companies with less than 250 employees, 7.75 euros per hour is provided, and for companies with more than 250 employees, 7.23 euros per hour is provided up to 6 months. Social insurance contributions are not imposed on the allowance that employees receive.

The most important action undertaken by the government since COVID-19 is eliminating employer's burden from applications for short-time work. Before such revisions, employers took on considerable additional burden. Due to the fact that the level of hourly subsidies are below the minimum wage, when short-time work schemes are implemented to employees that receive on or a little higher than the minimum wage, the employer has to pay the difference between 8.3 euros and 7.74/7.23 euros. For workers receiving three times the minimum wage, the employer has to bear approximately 10 euros per hour when applying for short-time work. However, under the revised scheme, the burden of employers are 0 euros. This is because that until the amount of wage loss is 4.5 times the minimum wage, the government provides 70% of the wage loss to employers. 70% of the minimum wage time 4.5 amounts to 4,849.17 euros per month. In order to encourage more use, the duration of subsidy for the short-time work was extended from 6 months to 12 months, and the limit of reduction in working hours per employee increased from 1,000 hours per year to 1,607 hours. The short-time work scheme is available for the dispatched worker if the employer who use the dispatched worker is approved for the short-time scheme. Aside from these actions, a wide range of measures to alleviate administrative requirements for employers to apply the support for short-time work is being implemented.

3. UK

The labor market in the UK has also been severely affected by COVID-19, no less than France. However unlike Germany and France, the UK do not have programs that support employment retention. In order to incentivize employers and to retain employment, the UK has implemented a bold program.

The Coronavirus Job Retention Scheme (hereinafter Job Retention Scheme) supports 80% of the previous year's wage to workers who have been furloughed from their workplaces affected by COVID-19, for a period of four months (March-June). The monthly ceiling is 2,500 pounds (around 2,850 euros), which is the median level of full-time workers' wage in 2019. The employer must pay its employees 80% of the previous year's wage or 2,500 pounds. It covers all directly hired employees, and dispatch agency employers can also apply for the wage grant for dispatched workers. This is similar to the Korean Employment Retention Subsidy and the French short-time work schemes in that employers are provided with government support to pay their employees a certain percentage for their wage loss. However the biggest difference is that it is a subsidy for a furlough of 3 weeks or longer, not for reduced working hours of individual workers. In other words, those who have been fully out of work for at least 3 weeks are eligible to receive support, and not those who just have reduced working hours. Another difference is that like Germany, the employer's share of social insurance contributions are also fully covered. Employer's shares of national insurance payment (13.8%) and the minimum share of workplace pension (3%) are also subsidized. This is because 80% of allowance that the employer provided to employees are regarded as wage, as in the case of Korea, and are subject to social insurance tax. Unless employers pay allowance that exceeds subsidies (top-up pay, in excess of 80% of the previous year's wage or 2,500 pounds) or contribute more than the statutory minimum share in the workplace pensions, the actual burden for employers is 0.[15)]

4. U.S.

With COVID-19 sharply turning for the worse in March, President Trump declared a state of emergency on March 13. It was followed by mandatory shutdowns in many states, which immediately negatively affected the labor market. This is well illustrated by the explosive growth in new unemployment insurance claims in the very next week after the emergency declaration.[16)] Under these circumstances, the US which, do not have an employment retention system like the UK, implemented two schemes under the Coronavirus Aid, Relief and Economic Security (CARES) Act that was passed on March 27th. Since the outbreak of COVID-19, the government has provided support of labor costs in SMEs through the Paycheck Protection Program (PPP) and Employment Retention Credit (EDC) that provides support of labor credit to SMEs that do not use the PPP.

PPP provides loans at 1% interest rate to SMEs with less than 500 employees in the amount equivalent to 1.25 times of the labor cost in the past two months. The maximum labor cost is 100,000 dollars, and the loan limit per company is 10 million dollars. It is important that the labor cost for 8 weeks (between Feb. 15 and the end of June) is exempt in full, so that there is no burden on employer's employment retention.[17)] However if employment is reduced or wage is cut by over 25%, the proportion for exemption is reduced.[18)] In order to protect workers at hotels and restaurants that are especially affected, for the purpose of distinguishing whether a business has 500 or fewer employees, the standard is based on the number of employees at each business and not the sum of all employees at each individual businesses. The PPP is similar to Korea's Emergency Business Grant for Small Merchants program.[19)] However unlike the Korean model, the aim of PPP is to retain employment through support for labor costs.[20)21)]

ERC provides 50% of labor cost of the companies that have not taken out PPP loans but are under COVID-induced mandatory shutdown or experiencing sharp fall in revenue until the end of 2020. Credits can be used to pay social insurance contributions or taxes, and remaining credit is refundable. Approval decisions are made on a quarterly basis, and the limit in support is 10,000 dollars of quarterly wage. Therefore, up to 5,000 dollars are

15) Application has been received since April 20 in the UK, and according to the ONS survey, 2/3 of businesses have applied within one week (until April 26), with 19% of the applicants already having received the subsidy.
16) The seasonally-adjusted new unemployment insurance claims were in the low 200,000 level until the week of March 14 (232,000), but skyrocketed since the week of March 21 to 3,307,000, 6,867,000, 6,615,000, 5,237,000, 4,412,000 and 3,829,000, increasing by more than 10 fold. The EI beneficiaries went from 1,784,000 in the week of March 14 to 17,992,000 in the week of April 18.
17) Fully waiving mortgage interest, rent and public duties that are quasi-fixed costs helps employers keep their business running and ultimately strengthen employment security. Over 75% of the subsidy must be used for labor cost.
18) The forgiven portion of the loan is reduced in proportion to the reduced employment and the reduced wage. If employment is reduced, the waiver on labor cost as well as other quasi-fixed-costs is also reduced. It essentially acts as penalty against employment cut.
19) Korea's Emergency Business Support program gives 1.5%-interest loan up to 10 million won to the self-employed regardless of their credit rating. It has been in place since April.
20) It can be indirectly estimated, as the PPP loan is set at 1.25 times of the labor cost and that at least 75% of the loan must be used for labor cost.
21) Although the first application was received on April 3, the 349 billion dollar PPP budget (allocated under the CARES Act) was already used up. An additional 310 billion dollars was allocated, and applications resumed on Aril 27.

<Table 3> Revision to Employment Retention Scheme by Country after COVID-19

Country	Title	Before COVID-19	After COVID-19
Germany	Kurzarbeit	- 60/67% of net wage loss of workers (covered under EI) of companies with serious business loss (60/67% of max. EI benefits or 4623.0/4321.5 euros) for 12 months. - No burden on wage loss for the employer, but social insurance contributions to be paid in the amount of appx. 30% of wage loss (full social insurance contributions (health insurance and pension) on a fictitious wage (= 80% of wage loss))	- Relaxed requirements: Over 10% wage reduction among over 30% of all employees → over 10% wage reduction among over 10% of employees - Broader coverage: Dispatch workers (temporary workers) are included; to be applied for by the temporary agency. - Less employer burden of social insurance contributions: employer's share of social insurance contributions to be fully refunded (until the end of 2020)
France	Activité Partielle	- Companies in mandatory shutdown or extreme difficulty would give max. indemnity to their employees whose working hours were reduced maximum of (70% of wage loss, 8.02 euros/hour) which will then be reimbursed to companies in the amount of 7.74/7.23 euros × working hours lost for 6 months. * Allowances are not levied with social insurance contributions.	- Relaxed administrative requirements: after-the-fact consultation with workers' group is allowed (within 2 months after the application), approval is determined within 2-15 days of application (”no decision” is regarded as approval, only in 2020) - Support to employer: subsidized to the maximum (70% of wage loss(topped at 4.5 times of minimum wage), 8.03 euros/hour). - Max. hours allowed: 1,000 hours/year → 1,607 hours/year (only in 2020) - Extended period: 12 months * Temporary agency workers can receive subsidy.
UK	COVID-19-Job Retention Scheme	None	- For individual workers on over 3 weeks of furlough from businesses seriously affected by COVID-19 (starting PAYE before March 19), 80% of the previous year's wage (up to 2,500 pounds which is the 2018/19 median wage of full-time workers) will be paid to the employer for 4 months (until end of June). * Employer must pay its employess 80% or at least 2,500 pounds. * Not supported in the case of partial shutdown. * Wage includes all monetary elements not under the discretion of the employer. * Temporary agencies can also apply. - The full amount of social insurance contributions on the subsidy (80% of wage) and employer's share of the mandatory workplace pension (at minimum share) are also subsidized.
U.S.	Pay-check Protection Program (PPP)	None	- To SMEs with up to 500 employees, 1%-interest loans will be granted in the amount of 1.25 times of labor cost of the past two months (limited at 100,000 dollars in annual salary); application received until June 30. * For companise with multiple places of business, employee count is the sum of all employees. But for hotels and restaurants, they are eligible when the employee count is below 500 at each place of business. * Independent self-business owners can also apply - Full exemption of labor cost, mortgage interest, rent and public tariff when employees are retained. For other items, interest is refunded 6 months later and the principal 2 years later. Such breaks are reduced in the event of employment reduction or wage cut of 25% or higher.
	Employee Retention Credit (ERC)	None	- For the companies that do not use PPP loans, and that experience COVID-induced mandatory shutdown or sharp drop in sales (over 50%), 50% of the wage (topped at 10,000 dollars in wage per quarter) will be supported from March 12 to Dec. 31. (Beyond 100 employees, it is applicable only to the employees who are not working) * Any credit left unused after paying social insurance contributions and taxes are refundable.

provided per employee. For a business with less than 100 workers, all employees are entitled to receive support, however for businesses with more than 100 workers, only employees that are on leave or out of work due to declining sales are eligible. A sharp decrease in sales mean that there is a 50% drop in sales from the previous year. The subsidy ends in the quarter after the quarter where sales recover to at least 80% from the previous year.

5. Changes in Employers' Labor Cost Burden After the Revised Employment Retention Scheme by Country

The German short-time work allowance was originally paid to employees from the government, so that there was no direct burden for the employers, however the employer still had to bear an amount equivalent to about 30% of the wage loss, as they had to bear the full amount of social insurance contributions on wage loss. Since COVID-19, the decision to fully return employer's social insurance contribution payments, the employer's burden from applying for short-time work became 0 euros. Therefore, employers that have struggled from COVID-19 can apply without additional burden for short-time work, and incentives to dismiss already employed workers are eliminated.

Under the French short-time working scheme, if the employer pays its workers shutdown allowance in the amount of 70% of their wage (8.03 euros/per hour), the government subsidizes these businesses up to 7.74/7.23 euros (below minimum wage). Thus efforts by the employer to retain workers would always incur a financial burden, which increases with higher wage levels. However the new law enacted on March 23 changed subsidies to employers from a flat amount(hourly) to the mandatory allowance of employers (70% of wage), which essentially reduces employer's burdens to 0. Only in cases when wages are over 4.5 times the minimum wage(6,927 euros), is when the employer has to bear 70% of the excess amount as shutdown allowance. Since the shutdown allowance is not subject to social insurance contributions, the employer has no burden for social insurance payments in this case.

In the case of the UK, the employment retention scheme was designed from the beginning to free the employer from any burden when trying to maintain employment relations through a furlough. This is because employers pay 80% of the previous year's wage or 2,500 pounds (if the 80% exceeds 2,500 pounds) to employees as allowance, and the government supports that 80% (up to 2,500 pounds) to the employer. The social insurance contributions for the allowance paid by the employer are also fully covered. The only time that the employer has to bear additional cost is when they voluntarily give more allowance than required (top-up pay) or when they are paying above the mandatory share of workplace pensions.

The U.S. model is also designed to place no labor cost burden on an SMEs that have less than 500 employees for retaining its workers on payroll. Almost all hotels and restaurants, that have presumably been quite severely affected by COVID-19, can receive support. Since PPP's

<Table 4> Changes in Employers' Labor Cost Burden According to the Revised Employment Retention Scheme by Country (excluding wage for active workers)

Country		Before New/Revised Employment Retention Scheme	After New/Revised Employment Retention Scheme
Germany		Full amount of social insurance contributions on fictitious wage (80% of wage loss) (health insurance and pension, 36.25% of wage +1.1% (additional health insurance))	0 euros * 37.6% of fictitious wage is refunded
France		Shutdown allowance of over 7.74/7.23 euros per hour	Almost 0 euros * Shutdown allowance in excess of 70% of 4.5 times the minimum wage
UK		Furlough allowance (80% of wage, max. 2,500 pounds) + social insurance contributions on furlough allowance (13.8%) + employer's share of workplace pension	Almost 0 euros * Only the amount in excess of the 3% minimum share in workplace pension
U.S.	PPP	Leave allowance + social insurance	0 dollars
	ERC	Leave allowance + social insurance	50% of leave allowance up to 10,000 dollars + leave allowance in excess of 10,000 dollars + social insurance contributions

support of labor cost is for workers not only on furlough but also those who are still working, it is more beneficial for the employer compared to the scheme in the other three countries. However for large companies with over 500 employees, ERC covers only 50% of the leave allowance, which means that they have to bear 50% of the labor cost as well as the full amount of social insurance contributions on the leave allowance.

IV. Assessment and Improvement of the Employment Retention Subsidy

The employment retention subsidy has been revised a number of times since COVID-19, with employment retention being the utmost priority of the labor market stabilization policy. Application requirements for paid shutdown/leave and unpaid leave have been eased, employer's burden on paid shutdown/leave has been lessened, and severely affected industries were included as specially designated industries so that they can be entitled to more beneficial conditions. Evidently, these measures will retain jobs for workers in employment risks. However it is still questionable on whether these measures have been enough to deal with COVID-19.

Boeri and Bruecker (2011)[22] observed that use of the short-time work scheme increase when employer's burdens are low and workers' benefits are high. For paid shutdown/leave,[23] workers are guaranteed at least 70% of their wage loss, while the employer has to bear at least 14% of the wage loss (or 20% of shutdown allowance). With higher wage levels, there are also increases in employer's burden. For example, if the wage loss is 126,000 won (3.771 million won/month), the burden of an employer that receives preferential support is 24.5% of the wage loss. Through a comparison with other countries and their schemes, a judgement on whether employer's burden and workers benefits are sufficient can be made.

Germany provides workers with an allowance equivalent to 60/67% of wage loss. France provides workers with an allowance of at least 70% of the wage loss, but since the allowance does not bear social insurance obligations, it is in fact 84% of wage loss. The UK provides support for 80% of wage loss or 2,500 pounds, which is the median wage of full-time workers in 2019. In the U.S, there is no defined minimum amount for the allowance, but given that PPP loans fully exempt the amount used as labor cost(up to 100,000 dollars), it is presumed that most workers will receive their original wages.[24] Such worker benefits in other countries, with the exception of Germany, are larger than in Korea. However the difference is not as large. Particularly in a situation like COVID-19, even if there is a slightly lower shutdown/leave allowance for workers it is unlikely to affect the use of paid shutdown/leave support programs because the benefits outweigh the unemployment insurance benefits and the absence of an external labor market.

In the case of Germany, the employer's burden for short-time work used to be around 30% of wage loss (under the employment insurance benefit ceiling), since COVID-19 the scheme has been revised to reduce the burden to 0.[25] In France, there was considerable burden on employers, since COVID-19 unless the employer voluntarily gives more than 70% of wage loss as allowance, there is no burden on the employer. In the case of the UK, employer's burdens are essentially 0, unless they voluntarily provide more than 80% of wage loss or 2,500 pounds to employees. Likewise in the U.S., the employer's burden on labor cost is 0, since the amount out of the PPP loans that were used

22) Boeri, Tito and Herbert Bruecker(2011), "Short-time work benefits revisited: some lessons from the Great Recession", Economic Policy 26(68).
23) For the purpose of this study, unpaid shutdown/leave is not included as there is no burden on the employer but benefits for workers are not clear.
24) It is specified that at least 75% of the loan must be used for payroll, which reduces motivation for the employer to cut wage. There is especially almost no probability of cutting the wage by over 25% since it will lead to reduction in loan forgiveness.
25) All of the measures to strengthen employer support in the countries discussed here are applicable on a temporary basis, only during when COVID-19 is expected to have a significant impact.

as labor cost would be fully reduced. In sum, countries that already had a short-time work scheme used to impose considerable burden on the employer, which was reduced to almost zero since the COVID-19 outbreak. Similarly, countries that did not have a short-time work scheme such as the U.K and the U.S had to come up with new schemes in the aftermath of COVID-19 designed them in a way to impose no burden on employers. Although these schemes are different in detail, they have similar goals to maximize incentives and to retain employees by eliminating employer's burden. These cases differ slightly from the Korean scheme. In Korea the employer has to bear at least 10% of the leave allowance as well as the social insurance contributions of the allowance. Furthermore, even as the rate of subsidies increased, the maximum amount of daily subsidies remained unchanged, which considerably reduced the share of wage loss that was subsidized as well as the effectiveness of the rate adjustment.

In a calamity like COVID-19, the policy priority should to encourage employers who are temporarily struggling to apply for the retention subsidy as much as possible. In this context, Korea, like other countries, should try to reduce employers' burden in other to apply for the subsidy down to become 0. First, government subsidies for shutdown allowance can be increased up to 100% for preferential support companies (90% for large companies).[26] In addition, refunding social insurance payment on the shutdown allowance (about 10% of the allowance) is also necessary.[27][28] Finally, the ceiling on government subsidies should be increased. It should be increased up to at least the amount that the wage loss that corresponds to subsidy ceiling before COVID-19 continues to corresponds to the subsidy ceiling (89,100 won/day).[29] Considering that the wage loss corresponding to the subsidy ceiling is too low compared to other countries, additional increase of the ceiling is necessary. The ceiling on employment retention subsidy does not have to match job-seeking benefits. Even now there are cases under the Special Exceptions for Parental Leave where the monthly ceiling is set at 2.5 million won.[30] The current move toward stronger support for employers are assumed to be transitory, to be effective only during serious catastrophes like COVID-19. In ordinary times it would be better to maintain existing schemes. This is because if support to employers are too generous in ordinary times, it could cause issues that Cahuc (2019) described.[31]

Finally, considering that indirect employment is broadly used in Korea, specific measures are needed to enable protection of indirectly employed workers under the employment retention scheme. In reality, it is difficult for indirectly employed workers to receive employment retention protection. A temporary agency or contract service company would distribute their workers to several companies, and if only some of the client companies suffer business troubles, the temporary agency or contract company will not be eligible to apply for shutdown allowance grant. Another reason is that even if temporary agencies or contract companies are eligible, they are unlikely to be able to bear their

26) "Measures to stabilize employment and businesses to overcome job crisis" (April 22, 2020) includes a plan to give loans to employers who find it hard to pay leave allowance. This would help ease the employer's liquidity constraint but would do little to motivate them to apply for the employment retention subsidy.

27) It could be reduced at the time of collection, but it would perhaps require legal amendments. Refunding would be an easier administrative process.

28) Even now, Durunuri program (social insurance contribution subsidy) supports the employer's share of the National Pension and Employment Insurance. And health insurance premium is also reduced for businesses with fewer than 30 employees in linkage with the Job Funds. But this type of existing scheme focuses on businesses with fewer than 10 employees, and subsidizes only a part of the insurance contirutions. It is also designed to focus the subsidy on new enrollees.

29) In explaining the reason for keeping the maximum unchanged, the Ministry of Employment and Labor, in "Notification on the period of special support for employment retention measures" points out that only 1.3% of workers apply to the maximum amount. But according to the final rate amended, the percentage of workers who correspond to the subsidy ceiling will now be higher. As the higher percentage increases the employer's burden, employers are likely to avoid applying for the grant. This is what makes the MOEL's grounds for keeping the maximum less than plausible.

30) Paragraph 2, Article 95 (Special Exceptions for Parental Leave) of the Employment Insurance Act provides in subparagraph 1: "In the event that two parents sequentially take parental leave for the same child, the parental leave benefit for the insured taking the second parental leave shall be equivalent to the normal monthly wage for the first three months. In such a case the monthly maximum shall be 2.5 million won."

31) Giving excessively generous benefits to employers in normal times also has the problem of encouraging employer's frequent use of the scheme, in addition to the issues discussed in Introduction.

share of the shutdown allowance or social insurance contributions.[32] Considering the circumstances, the recommendation is to establish institutions that when the client company applies for employment retention subsidies, the entitlement of applying for the subsidy for indirectly hired workers by temporary agency are automatically given. Also, until the end of COVID-19, it is necessary to provide 100% support for shutdown allowance and reimbursements for all social insurance contributions. In addition, it is suggested that the employer's ability to pay for social insurance contributions and share of shutdown allowances should be strengthened through a proportional funds for indirect employment in order to prepare against emergency situations such as the recurrence of COVID-19.

[Appendix] Changes in Employer's Burden by Level of Wage Loss

A review on how an employer's burden for one employee changes depending on the level of wage loss when it is the same as the full wage and (full shutdown/leave) allowance is 70% of wage loss. A daily maximum of 66,000 won is C, and the daily wage loss that makes the allowance reach the daily maximum (66,000) is B. The equation is as follows: B=(10/7)×C=94,000 won. The employee's wage loss is W.

First, let's review when W≤(10/9)×B=105,000 won (3.143 million/month). In this case, the government support does not exceed the daily maximum both before and after the revision.[33] In this case the employer only has to pay its share out of the allowance and social insurance contributions. Employer's burden is reduced from (7/10)×W×[1/3+0.1]=30.3%×W to (7/10)×W×[1/10+0.1]=14.0%×W.[34] In other words, if wage loss is no more than 3.143 million won per month, employer's burden decreases from 30.3% of wage loss to 14.0%.

Next is when (10/9)×B<W≤(3/2)×B. This is when government subsidy did not exceed the daily maximum before the revision but does now. Before the revision the employer only had to pay its share of the allowance and social insurance contributions. But after the revision, it has to cover all of the allowance above the daily maximum as well as its share of social insurance contributions. Thus the employer's burden is reduced from 30.3%×W to (7/10)×[[W-B]+W×0.1]=(7/10)×W×[1.1-(B/W)]. If W=(4/3)×B, employer's burden is 24.5%×W. That is, if wage loss is 126,000 won (3.771 million won/month), wage loss is reduced from 30.3% to 24.5%. It suggests that keeping the subsidy ceiling less than 9/10 of shutdown allowance considerably reduces the benefit of the subsidy.

Last is when W>(3/2)×B=141,000 won (4.243 million/month). The employer's burden in this case remains unchanged as it has to bear all the allowance above the daily maximum and its share of social insurance contributions employer. That is, employer's burden is (7/10)×[[W-B]+W×0.1]=(7/10)×W×[1.1-(B/W)]. For example, if W=2×B, employer's burden is 42%×W, or 42% of wage loss.

<Table 5> Changes in Employer's Burden by Level of Wage Loss

Range of Wage Loss	Change in Employer's Burden
Up to 105,000 won (3.143 mill. per month)	30.3% of wage loss → 14.0%
Over 105,000 won - 141,000 won	If wage loss is 126,000 won (3.771 mill./ month), 30.3% of wage loss → 24.5%
Over 141,000 won (4.243 mill. per month)	If wage loss is 189,000 won (5.657 mill/ month), 42.0% of wage loss → 42.0%

32) If the measures increasing the rate of support to employers mentioned above are implemented, temporary agencies or contract companies ability to pay the allowance will not be a problem.

33) Government support was (2/3)×(7/10)×W before the revision, and (9/10)×(7/10)×W after the revision. Thus government support before the revision was below the daily maximum: (2/3)×(7/10)×W≤(2/3)×(7/10)×[(10/9)×(10/7)×C]=(2/3)×(10/9)×C<C. After the revision, it is at or below of the daily minimum (9/10)×(7/10)×W≤(9/10)×(7/10)×[(10/9)×(10/7)×C]=C.

34) Employer's share of social insurance contributions differ employer by employer because the rate of employment stability and skill development insurance premium and industrial accident insurance premium differ by the company size and sector. For the purpose of this study, the rate is roughly assumed to be 10%.