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2020 Labor Market Assessment and 2021 Outlook*

Center for Labor Trend Analysis**

In 2020, the employment of temporary workers in face-to-face services such as food and lodging, educational services, health and welfare services, etc. was hit hard, especially among the young, the middle-aged, and women, who were largely employed as temporary workers. As long as the situation of the spread of COVID-19 does not change significantly, this situation is likely to continue. Increasing number of the middle-aged people moved into the economically inactive population and the youth unemployment rate is on the rise recently. Employment in the manufacturing industry continued to decline, and the employment in construction industry was not free from the industrial slowdown. In the second half of the year, employment in the non-face-to-face service industry increased, but employment in the face-to-face service industry failed to rebound. The employment situation next year will vary significantly depending on the extent of the

spread of COVID-19. If the current COVID-19 situation continues, the number of the employed is expected to increase by 195,000 in 2021. The employment index may exceed the aforementioned forecast due to factors such as the recovery of the manufacturing industry in the second half of 2020, the increase in employment in the construction industry, the expansion of jobs with financial support, and the improvement of the COVID-19 situation.

I. Introduction

In the first half of 2020, the spread of the COVID-19 significantly affected about 2 million jobs in the two months of March and April. The number of employed decreased by 1.02million and the number of workers on temporary leave increased by 990,000. From May to Au-

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gust, the labor market recovered rapidly from the shock, but from September, it has stagnated due to the re proliferation of the COVID-19.

In 2020, temporary jobs in face-to-face service industries such as food and lodging, educational services, and health and welfare services were dealt a big blow. The young, middle-aged, the elderly and females who were largely hired as temporary workers were hit hard. As long as the situation of the spread of COVID-19 does not change significantly, this situation is likely to continue. Hereinafter, we will look at the situation of the labor market in 2020 in detail, and finally, we will look at the 2021 outlook of the employment situation.

II. Evaluation of the 2020 Labor Market by Sector

1. The Middle-aged Workers Moving into Economically Inactive Population and the Increasing Youth Unemployment

The number of youth employment (youth aged 15-29) showed a recovery in June after a 230,000 decline in March to April when the COVID-19 pandemic was on its rise. However, since September, when the effect of the COVID-19 re proliferation was reflected in the labor market, the number of youth employment declined. In 2020, the number of employment declined in the COVID-19 vulnerable industries, such as education services, food and lodging.

In the youth labor market, the number of unemployed fell until April 2020, and the number of potential job seekers and potential workers eligible to work in a matter of time was increasing. As social distancing eased in May and more people wanted to enter the labor market, the number of unemployed gradually increased.

The number of middle-aged (ages 30-59) employment

decreased by 396,000 on average from the same period last year until October, while the unemployed and economically inactive population increased by 30,000 and 170,000 respectively. Men haven't deviated significantly from the gradual decline in employment since 2018 in most industries. For women, whose employment rate has steadily increased, employment has declined significantly since the spread of COVID-19. The number of female employment declined mainly in industries with frequent face-to-face contact, such as food and lodging and education services.

The number of unemployed middle-aged female increased by 36,000, and as the unemployed who formerly engaged in face-to-face service moved to the unemployed bucket, female workers' willingness to return to the labor market was higher than that of men. For men, on the other hand, the number of employed has decreased and the number of economically inactive population increased, but most of them are moving to the "temporarily on leave" bucket.

Among the elderly aged 60 and over, the increase in the number of employed is expanding from 2019, and they are continuing to actively participate in economic activities. The number of employed has increased by 390,000, of which 120,000 are in the public administration and health and social welfare industries related to job programs for the elderly.

The COVID-19 is affecting the number of the temporary workers, most of whom are in elderly group. In particular, the super elderly in their 70s and over who participated in the elderly job program became temporarily on leave in compliance with the government's quarantine guidelines. The number of workers on temporary leave in their 30s-40s were mostly engaged in education service but the job situation in this group recently improved. Over 100,000 people in their 50s and 60s take temporary leave every month in various industries and prolonged temporary leave could naturally lead to their retirements from economic activities.

<Table 1> 2020 Employment Index by Gender and Age Group (Jan~ Oct Average)

(Unit : 1,000 Persons, %, %p, Year-on-year)

		Male	(Increase/Decrease)	Female	(Increase/Decrease)
Age 15~29	Employed	1,835	(-79)	1,940	(-86)
	Unemployed	206	(-9)	173	(-15)
	Economically Inactive	2,419	(12)	2,351	(30)
	Employment Rate	41.1	(-1.1)	43.5	(-1.2)
	Unemployment Rate	10.1	(0.0)	8.2	(-0.3)
	Temporary Leave	36	(22)	57	(32)
Age 30~59	Employed	10,703	(-174)	7,373	(-222)
	Unemployed	317	(-6)	237	(36)
	Economically Inactive	1,172	(107)	4,131	(64)
	Employment Rate	87.8	(-0.9)	62.8	(-1.2)
	Unemployment Rate	2.9	(-0.0)	3.1	(0.5)
	Temporary Leave	210	(92)	328	(122)
Age 60 and over	Employed	2,843	(190)	2,215	(198)
	Unemployed	112	(5)	74	(12)
	Economically Inactive	2,415	(105)	4,246	(116)
	Employment Rate	52.9	(0.6)	33.9	(1.4)
	Unemployment Rate	3.8	(-0.1)	3.2	(0.2)
	Temporary Leave	105	(65)	147	(121)

Source : Statistics Korea, 「Economically Active Population Survey」, Original data, Each Year.

2. Significant Decrease in Wage Workers in Temporary Jobs

The number of wage workers declined three times since the statistics data is available: January-April 1993, the financial crisis of 1998-99, and March 2020, when the spread of COVID-19 began. While the decrease in wage workers during the financial crisis was driven by the significant decrease in regular workers due to bankruptcy, etc., in this COVID-19 crisis, the decrease in temporary and daily workers had a major impact on the decrease in wage workers. Self-employed (employers + self-employed) also saw a deeper decline. During the global financial crisis, there also have been cases of employment adjustment among temporary/daily workers and self-employed workers after the macroeconomic shock. The difference from

the recent COVID-19 crisis is that the decrease in temporary jobs is at an exceptional level.

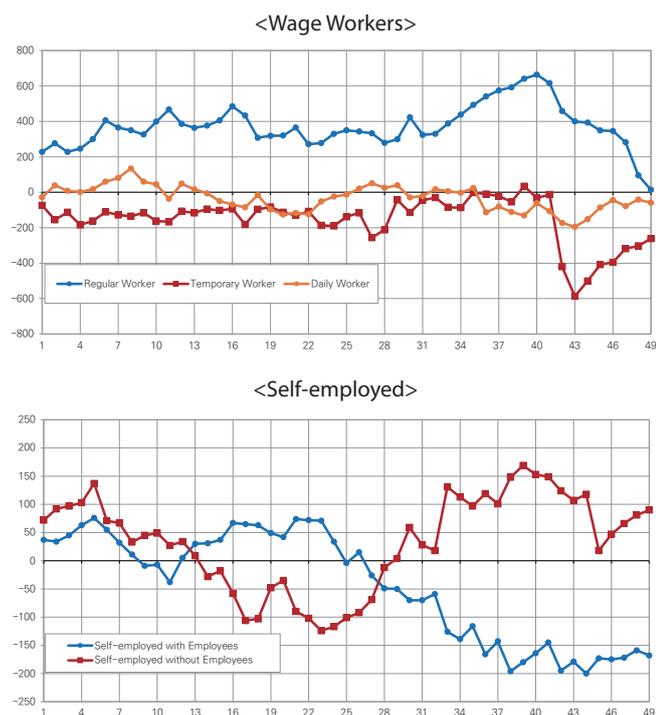
In 2020, the changes in the number of temporary workers had the biggest impact on the changes in the number of employed. Temporary workers are workers whose employment contract period is between 1 month and 1 year according to the economically active population survey. Temporary jobs are relatively sensitive to economic fluctuations, and are largely located in the industries that are directly affected by COVID-19. Employment fluctuations by job position are shown in [Figure 1], which confirms that COVID-19 has a huge direct impact on temporary workers in particular. According to seasonally adjusted data, the number of temporary workers declined sharply in March compared to February, just before COVID-19 spread in earnest, and did not recover to the level before

the outbreak of COVID-19 until October (see Figure 2). After the spread of COVID-19, the number of temporary jobs decreased by an average of 399,000 from the same period last year, the largest decrease since 2000. With the exception of the temporary jobs in public administration and health and social welfare, in which the number of temporary jobs are heavily impacted by the government job projects, the number of temporary jobs in most industries declined significantly. The number of temporary workers decreased significantly in food and accommodation, wholesale and retail, education, associations and organizations, and the number of temporary workers in arts and sports also decreased since March. In the aforementioned industries, the number of temporary jobs dropped by about 377,000 from March to October with a greater decline among female workers than male. On a monthly basis, as the social distancing is easing in phases, the size of temporary job reduction bottomed out in April and picking up until October against the same months in the

previous year. The seasonally adjusted figures are also increasing compared to the previous month, excluding September, when the impact of reprodiferation of COVID-19 was reflected.

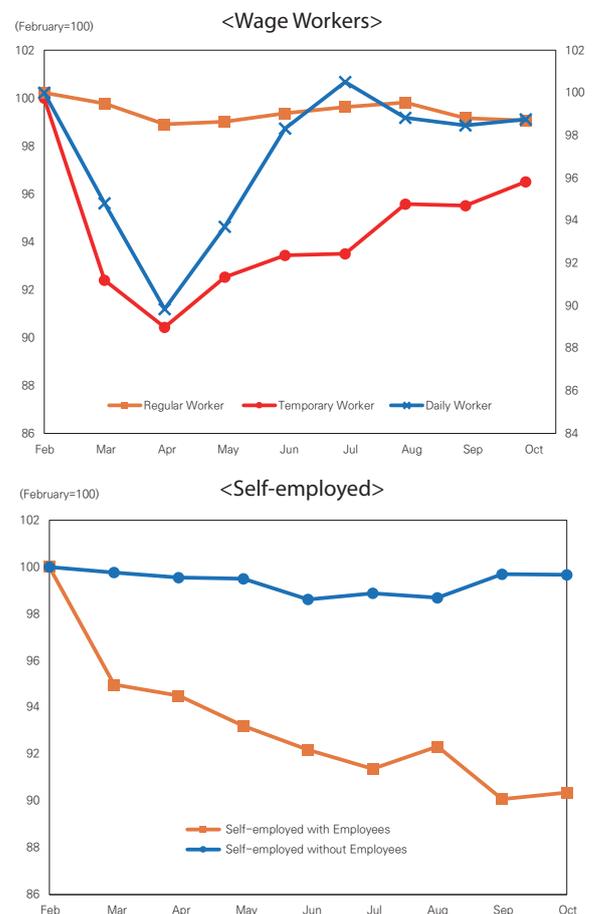
The changes in the number of temporary workers is also associated with the number of new temporary workers. Due to the spread of COVID-19, there was a phenomenon of canceling or delaying new hiring, which also immediately affected temporary jobs. Looking at those employed for less than 3 months as new hires, the number of wage workers decreased by an average of about 480,000 from March to May during the initial stage of COVID-19 pandemic, while temporary workers alone decreased by 380,000. In the face-to-face service industry including wholesale and retail, food and lodging, public administra-

[Figure 1] Long-term Trend of the Employed by Job Position (Unit : 1,000 Persons, Year-on-year)



Source : Statistics Korea, 「Economically Active Population Survey」, Each Year.

[Figure 2] Employment by Position after the Spread of COVID-19 (Unit : 1,000 Persons, Year-on-year)



Source : Statistics Korea, 「Economically Active Population Survey」, Each Year.

tion, and health and social welfare industry, the number of temporary workers, which declined significantly, began to increase again after June.

In temporary jobs, the increase in temporary leave was noticeable, along with a decrease in the number of workers. Nearly half of the increase in workers on temporary leave (workers on leave who are employed but not working due to temporary reasons) has resulted from temporary jobs between March and October. Particularly, there was a big increase from public administration and health and social welfare sector. This is because the elderly job program is temporarily suspended and resumed during COVID-19 pandemic. The number of temporary workers on leave increased by an average of about 520,000 from March to May. However as social distancing has eased since then, the increase in the education service, public administration and health and social welfare industry has shrunk. There was also a temporary increase in September due to the re proliferation of COVID-19, but overall, the number of temporary workers on temporary leave has stabilized after May.

Even before the spread of COVID-19, the number of self-employed was on decline, and since March 2020, fluctuations appeared in industries heavily impacted by COVID-19. The number of self-employed, which tends to increase when the economic conditions are not good since the financial crisis, has increased by 82,000 between March and October compared to the same period last year. On a monthly basis, the increase narrowed due to the reduced employment in accommodation, food, wholesale, retail, and education industries.

The number of self-employed with employees (employers) has repeatedly increased and decreased in relatively short cycles since the financial crisis. The number of employers, which has declined for 15 consecutive months until February 2020, was expected to rebound this year, given the previous move. However, it has continued to decline until October and is on a decline for 23 consecu-

tive months. The number of employers decreased by an average of 180,000 from March to October, and especially in the food and accommodation industry, the decline has deepened since March. Immediately after the outbreak of COVID-19, the number of employers decreased every month and there was an additional 9.6% more drop in October compared to February data (see Figure 2).

3. Employment in Manufacturing Continues to Decline

The change in the number of employment by industry is shown in [Figure 3]; this figure shows the changes in the number of employed from March after normalizing the number of employed in February for each industry to 100. [Figure 3] shows the industries in which the number of employed is still in decline during the second half of the year. The food, lodging, and real estate industries are among the face-to-face service industries with a large decline in the number of employed. Compared to February, the number of employed in the food and lodging industry decreased by 8.7%, and the real estate industry by 8.0%. The arts, sports, and leisure-related service industries seemed to recover rapidly until June after a decline in March, but in the third quarter, the number of employed again began to decline. The wholesale/retail and the manufacturing industry are on a continuous decline.

[Figure 3] shows the industries where the number of employed has declined significantly since February, and then has returned to some degree of recovery. As various public work projects resumed in the second half, the number of employed in public sector exceeded the employment level in February. Employment in the construction, business facilities management and support service industries has surpassed the level of employment in February since August. Employment in the education service industry improved as school partially reopened after May but declined again since August.

Looking closely at each industry, the decline in the number of employed in the manufacturing industry increased from the second quarter, but compared to the previous quarterly adjusted data, it is on the line of the existing declining trend. Compared to many face-to-face service industries, the impact of COVID-19 was not very clear. The decline in the number of people insured by employment insurance and workers in the workplace labor force survey decreased since the second quarter, but the number of employed in the economically active population survey declined further in October.

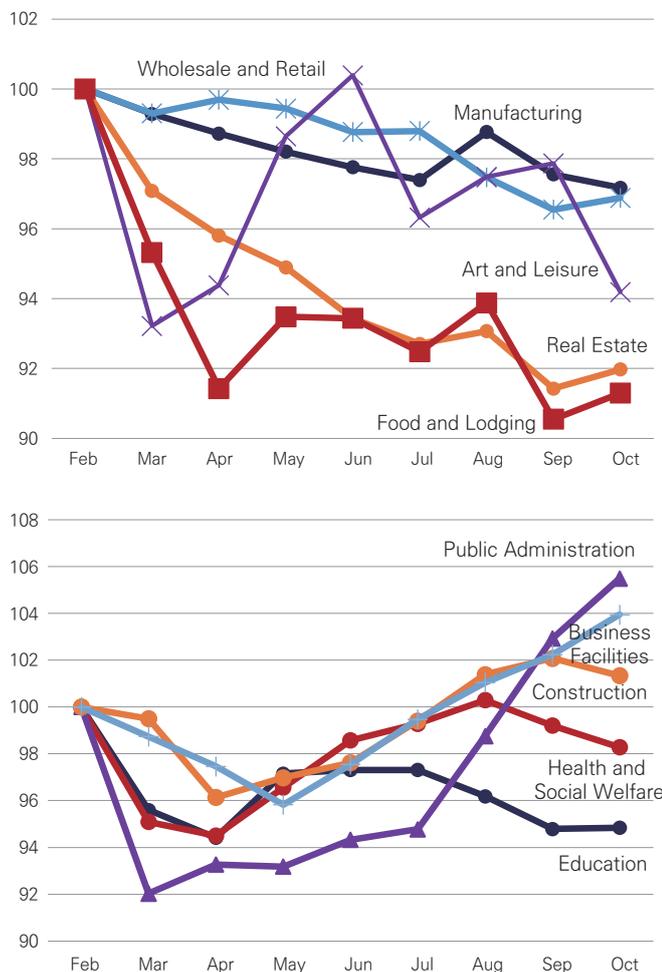
By industry in detail, the automobile and trailer manufacturing industry has improved in the second half of 2020. Exports and production declined due to deteriorating external demand for finished cars, but domestic demand increased 6.2% year-on-year from January to October. Apart from the recovery trend, due to the nature of the industry, it is unclear whether the changes in business condition will lead to an immediate change in employment. It is expected that the recovery of the BSI and the increase in eco-friendly car exports (12.1% from January to October) will serve as positive factors for employment in this industry.

The production of electronic components, computers, video, audio and communication equipment increased mainly in the semiconductor industry. Leading indicators related to semiconductors, such as the amount of equipment imports for semiconductor baths and orders for special industrial machinery, continued to increase. The decline in the number of workers in the workplace labor survey and insured in the employment insurance has also decreased since August, so it is hard to see that there is a special problem with employment in this industry.

The primary metal, metal processing and other machinery manufacturing industries were sluggish. Primary metal and metal processing production continued to be poor as the situation in downstream industries such as construction, shipbuilding and automobiles was not smooth. Along with the downturn in the industry, the number of people insured for employment insurance and workers partici-

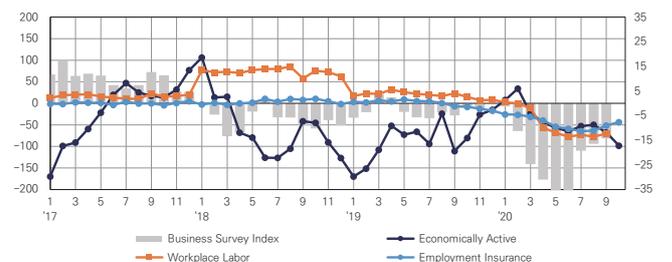
participating in the industry, the number of people insured for employment insurance and workers partici-

[Figure 3] Changes in the Number of Employment by Industry: February Figure Normalized as 100



Source : Statistics Korea, 「Economically Active Population Survey」, Each Year.

[Figure 4] Manufacturing Business Survey Index (BSI) Growth Rate, Increase and Decrease in the Employment Index (Unit : %, 1,000 Persons, Year-on-year)



Source: Statistics Korea, 「Economically Active Population Survey」, Original Data, Each Year; Ministry of Employment and Labor, 「Workplace Labor Force Survey」, KOSIS; Korea Employment Information Service (KEIS), 「Statistics on Employment Administration」, EIS; Bank of Korea (BOK), 「Business Survey Index」, ECOS.

pated in the workplace labor survey were decreased at the same time. Although the scale of the decline is not growing, a prolonged downturn in downstream industries could have a negative impact on employment in these industries.

4. Employment in the Construction Industry with Anticipation for the Revival

The construction industry has continued the slowdown in employment since 2018 but has rebounded slightly in the third quarter of 2020. Construction orders increased sharply as orders for private housing surged and construction investment turned to decline after a 4.2% increase in the first quarter, but next year is expected to be better than this year. In the construction industry, the proportion of temporary and daily workers is high among workers, and the amount of employment is rapidly adjusted according to the industry conditions. Therefore, the direction of employment in the construction industry is expected to be determined depending on how much factors such as licensing for increased private housing orders and the increase in SOC budget contribute to the revival of the construction industry.

5. Non-face-to-face Service Industry with Increase in Employment and Face-to-face Service Industry Failing to Rebound

The service sector was directly impacted by COVID-19, with a significant drop in employment in the first half of 2020. Looking at the number of seasonally adjusted employment, there was a rebound in May and June, but service industry employment continued to be sluggish in the third quarter as the COVID-19 situation prolonged. The number of workers on temporary leave in the service industry surged in September due to the re proliferation of COVID-19 in August and then decreased in October. Working hours are also increasing during periods when

the number of confirmed cases decreases, such as May-July and September-October, so the adjustment of working hours is very flexible in accordance with the spread of COVID-19.

The face-to-face service industry declined sharply in the first quarter, and then the decline moderated to some extent in the second quarter. However, in the third quarter, there was a marked decrease in employment since August, when the number of confirmed COVID-19 cases increased. The number of face-to-face service workers in September returned to the April level and there was no significant change in October. It is interpreted that there is no significant changes in employment because it is not easy to increase employment in a situation where uncertainty prevails as business restrictions are frequent due to the spread of COVID-19, such as the implementation of social distancing.

On the other hand, in the non-face-to-face service industry, employment increased steadily after the COVID-19 shock in February, and employment increased in September and October despite the re proliferation of COVID-19 in August. For the time being, the growth of employment in the service industry is expected to be driven by the non-face-to-face service industry.

Looking closely at the face-to-face service industry, first of all, in the wholesale and retail industry, the number of employed people decreased significantly as the impact of COVID-19 was added to the existing declining trend. In the third quarter of 2020, the number of employed people, especially regular workers, has been declining. In terms of working hours, the number of employees working more than 36 hours decreased significantly, indicating that the decrease was mainly due to the decrease in full-time workers.

Food and lodging are the sectors most affected by COVID-19 this year. In the third quarter, the decrease in the number of regular workers accelerated, and the decline in daily workers also expanded. By working hours,

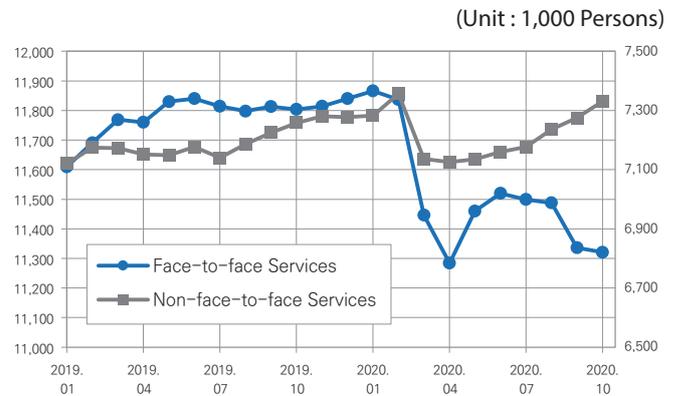
the employment decline was mainly for the decline from the number of full-time workers who worked more than 45 hours. However, the working hours of those who maintain employment are increasing compared to the first half, replacing the decrease in the employment of long-term workers with the direction of increasing the working hours of short-time workers.

In the education service industry, there was no significant improvement after employment fell sharply in the first half. In the third quarter, the decrease in the number of temporary workers by occupational status was remarkable, most of them decreased in small and medium-sized businesses with less than 10 to 30 employees and large businesses with more than 300 employees. According to the workplace labor survey, the decrease in the number of other workers, including tutors, continued in the second half of the year. Therefore, the employment decrease in the education service industry in the second half was mostly from those employed in relatively unstable employment conditions.

The health and social welfare service sector continued to grow despite the COVID-19 situation. However, looking at the detailed sector, the number of insured in the employment insurance decreased slightly in the social welfare sector in the third quarter. As COVID-19 prolongs and social distancing is enforced, the use of non-residential welfare facilities has been restricted and the demand for care workers has decreased.

Looking at the non-face-to-face service industry, transportation and warehousing, including the passenger transportation industry, is one of the industries where the impact of COVID-19 has been huge. Travel demand has not recovered in the third quarter and as the repropagation of COVID-19 overlaps, the transportation and warehousing industries such as land and air transportation are not doing well in the third quarter. However, because non-face-to-face consumption activities such as online shopping and food delivery are still active, the transport

[Figure 5] Number of Seasonally Adjusted Employment in Face-to-face and Non-face-to-face Services



Source : Statistics Korea, 「Economically Active Population Survey」, Original Data, Each Year.

and warehousing businesses related to the delivery business are supporting the employment of the self-employed in the transport and warehousing businesses.

As for the number of employed in the economically active population survey, employment rebounded until May and declined from June. The corporate economic index, the number of workers in the workplace labor survey and the number of insured in the employment insurance have all improved since May. Therefore, looking at the industry as a whole, the employment situation is not so bad. By specific industry, the number of workers and employment insurance insured people in the industries beneficiary of COVID-19, such as the publishing industry including software development and computer programming and information service industry, is increasing, so the number of employed can also be expected to rebound positively.

Employment trends in professional, scientific, and technical service sectors also vary greatly from data to data. Compared to the same month of the previous year, the economically active population maintained an increase in the first half of the year, but decreased in the third quarter. On the other hand, the number of workers in the workplace labor survey and insured in the employment insurance is increasing in the second and third quarters, and the increase is particularly strong in September and October. According to the workplace labor survey and

employment insurance data, employment is increasing in R&D and construction technology engineering.

The business facility management and real estate rental service industries showed a V-shaped rebound as employment increased sharply in the second and third quarters after employment fell in the first half. The corporate economic index is still on the decline, but it has been improving since July. Similarly, the number of insured in the employment insurance is also reducing the decline, suggesting that the overall industry situation is improving.

In the public administration, there was a decrease in employment due to delays in the employment project for the elderly in the first half of the year, but the employment increased significantly in the third quarter as the employment project was implemented extensively. The trend is consistent with the increase in the number of people in the workplace labor survey and insured in the employment insurance. The number of temporary works, especially simple labor jobs such as cleaning and office work, increased.

III. Employment Outlook for 2021

Next year's employment situation will be very different depending on the extent of the spread of COVID-19. Since the employment situation in 2020 exhibited large

short-term fluctuations, the indicators of the employment situation in 2021 include a lot of base effects. If the current COVID-19 situation is maintained, the number of employed people is expected to increase by 195,000 in 2021. Considering the base effect of an exceptionally large increase in the number of employed by February 2020 and the fact that the situation of the COVID-19 spread will not be resolved easily, the number of employed is expected to increase only by 40,000 in the first half of 2021. On the other hand, since the number of employed decreased significantly in the second half of 2020 (-369,000 compared to the first half of the previous year), even if the current situation does not improve significantly, it is expected that there will be an increase in the number of employed by about 350,000 in the second half of 2021 due to the base effect.

Factors that may improve employment conditions include: First, the manufacturing economy recovered in the second half of 2020. Second, employment in the construction industry may increase due to the increase in construction investment and private housing construction. Third, the government plans to further expand the financially supported job projects in 2021. Finally, and most importantly, there is room for improvement in the COVID-19 situation. If the above factors act, next year's employment indicators could exceed the above forecast.

< Table 2 > Employment Outlook for 2021

(Unit : %, 1,000 Persons)

	2020			2021*		
	1H	2H*	Annualized*	1H	2H	Annualized
Employed	26,799	27,018	26,909	26,839	27,368	27,104
(Growth Rate)	-0.2	-1.3	-0.8	0.1	1.3	0.7
(Increase/Decrease)	-60	-369	-214	40	350	195
Unemployment Rate	4.2	3.7	3.9	4.2	3.7	3.9
Employment Rate	59.9	60.3	60.1	59.7	60.8	60.3

Note: * is outlook.

Source : Statistics Korea, 「Economically Active Population Survey」, Original Data, Each Year.