



KLI Working Paper

November 15, 2022

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Hours Actually Worked and Hours Paid for : The Current State and Measures to Reduce the Gap

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I. Research Background and Focus

Recently, Korea has seen a decline in the number of hours worked as well as the rapid spread of flexible working time arrangements. As is well known, the 52-hour workweek cap—allowing a maximum of 52 hours work per week, including overtime—was phased in by company size (workplaces with 300 employees or more from July 2018; workplaces with 50~299 employees from January 2020; and workplaces with 5~49 employees from July 2021). Also, the flexible working hour system was implemented with a unit period of 6 months in phases depending on the size of the company (workplaces with 50 employees or more from April 6, 2021; and workplaces with 5~49 employees from July 2021).

Moreover, paid public holidays (statutory holidays of government offices) have been applied to private sector employees in phases by company size (firms

with 300 employees or more from January 2020; firms with 30~299 employees from January 2021; and firms with 5~29 employees from January 2022). In addition to the expansion of these paid public holidays, a week is now defined as 7 days including holidays, and employers are required to pay workers an additional 50% of wages for less than 8 hours of holiday (statutory or contractual) work, and 100% of wages for 8 or more hours of holiday work (from March 20, 2018).

Since the 2010s, Kiu Sik Bae et al. (2011, 2013), Sung-teak Kim et al. (2019), and Yeon Jeong Son et al. (2019) have been referred to as the representative studies on the current status of a shortening of working hours and the adoption of flexible work arrangements as well as related policy effects. However, studies on the implementation status of the expanding statutory holidays or the hours paid for but not worked are very limited, with only Dong-Gwan Jung et al. (2016), Sung-teak Kim et al. (2018), Ki-Sun Kim et al. (2015),

and those published by the Ministry of Culture, Sports and Tourism (after 2017) available.

If the actual working hours are reduced, and payments in respect of time paid for but not worked are expanded according to the collective agreements or rules of employment of individual firms, the gap between the hours paid for (i.e. the hours actually worked plus the hours paid for but not worked) and the hours actually worked will widen, which may cause a wage gap arising from institutional factors that cannot be explained by the difference between the hours actually worked.

And if the quasi-fixed labor costs linked to the number of workers rather than that of working hours rise as a result of the labor policy in which the hours actually worked are reduced and the hours paid for are increased, companies may prefer to see the expansion of overtime work by existing workers rather than to hire additional workers to minimize labor costs. Of course, since the overtime limit is legally set at 12 hours per week, such a possibility will not be as large as before.

In addition, the expansion of statutory holidays and the resulting increase in payments in respect of time paid for but not worked are causing controversies and confusion surrounding the calculation of the ordinary hourly wage and the comparison with the minimum hourly wage. In Korea, the ordinary hourly wage is almost always calculated based on the total number of hours paid for (contractual working hours plus hours paid for but not worked, i.e. statutory or contractual paid holidays). And, the converted hourly wage, which is used to determine whether the minimum wage is violated, is calculated by dividing the monthly wage (wages included in the minimum wage) including the statutory weekly holiday allowance by the number

of contractual working hours (174 hours per month) and hours paid for in statutory weekly holidays (35 hours per month). Meanwhile, in major international organizations (EUROSTAT: statistical office of the European Union) and countries (BLS: U.S. Bureau of Labor Statistics) that investigate the hours paid for through wage statistical surveys, the hourly wage is calculated by dividing the monthly wage (excluding overtime and special payments) by the number of monthly hours paid for.

As explained above, the expansion of paid public holidays and payments in respect of time paid for but not worked due to the recent revision of the Labor Standards Act and the enactment of the Act on Public Holidays are widening the gap between the hours actually worked and the hours paid for. Now, the question is to what extent is this gap between the hours actually worked and the hours paid for appearing within and between characteristics of firms? This study examines ways to achieve statistical improvement to accurately identify the current status as well as policy measures to narrow the gap.

In order to fulfill this purpose, this study is structured as follows:

First, it explores the concept of working time and its relationship with other economic indicators. On the subject of the concept of working time, we introduce the ILO resolution that defines various concepts of working time, and examine how various concepts and indicators are defined, investigated, and aggregated in Korea's labor relations laws and statistical surveys, as well as in statistical surveys of major international organizations and countries. Next, moving on to the subject of the relationship between working time and other economic indicators, we discuss how productivity, labor cost, hourly wage, etc. are linked

and aggregated with various concepts of working time. By doing so, we seek to come up with measures to improve statistical surveys related to working hours.

Second, it examines the survey data on the current status of working hours and annual holidays/leaves of manufacturing businesses employing 5 or more employees by company size and union presence. To explore how the working hour systems are operated, we reviewed the average number of work days per week; whether there is usual overtime work and the inclusive wage system in place; usual contractual and overtime hours; whether weekly holidays and non-working days are paid as well as the number of hours paid for but not worked. Next, in order to check the status of operating annual holidays/leaves, they are divided into statutory or contractual, paid or unpaid, holidays and leaves. In particular, we checked if the businesses have regulations on statutory holidays, annual leaves, and major contractual leaves (summer vacation, congratulatory and condolence leave, sick leave, etc.), whether they are paid or not, and the number of days granted. Finally, based on the results of the fact-finding analysis, we estimate the number of annual paid holiday/leave and the number of annual hours actually worked and hours paid for. By doing so, we seek to identify the gap in the number of hours actually worked and the hours paid for between characteristics of firms and look at ways to ease the gap.

Third, it summarizes the above analysis results, based on which it attempts to design measures to improve statistical surveys for identifying the actual status of working hours, and to draw policy implications for easing the gap between the number of hours actually worked and the hours paid for within and between characteristics of firms.

II. Concept of Working Time, and Its Relationship to Other Economic Indicators

This section examines different concepts of working time decided by the ILO, and how they are being surveyed and used at home and abroad. We also analyzed how the concepts of working time are related to income, productivity, employment rate, labor cost, and hourly wage. The main analysis results are as follows:

First, in terms of the concepts of working time and statistical surveys, the ILO established a systematic concept of working time that can be flexibly applied to various working conditions, which are largely divided into: the concept associated with the actual working hours such as “hours actually worked”, “normal hours of work”, and “hours usually worked”; and the concept linked to remuneration of hours such as “hours paid for.”

In Korea, working time is often defined and surveyed using the concept of “hours actually worked.” For example, the Labor Standards Act mainly uses the concepts related to “hours actually worked,” but their rough definitions present difficulties in practical application. In addition, domestic statistical surveys on working time generally survey the hours actually worked. The recent improvement in Statistics Korea’s annual working hour survey and the change in the Bank of Korea’s method of working out full-time equivalents are all designed to enhance the estimation of hours actually worked.

However, it appears that “hours actually worked” and “hours paid for” are used interchangeably internationally, depending on the purpose of statistical surveys. For example, the OECD places importance on productivity analysis so it focuses on measuring

the hours actually worked, which is conceptually suitable for their purpose. On the other hand, the United States (CES survey) or Europe (SES survey) tend to investigate the hours paid for in order to understand the labor cost according to employment or the wage structure of workers by conducting surveys on business establishments.

Next, our analysis of the relationship between the concept of working time and other economic indicators shows that, first, working hours tend to shorten in the mid-to long-term when income level is improved. Second, when measuring labor productivity, the concept of hours actually worked may be sufficient, but in the case of measuring multi-element productivity, hours paid for can also be an important variable. For example, a rise in non-working hours, that is, an increase in hours paid for, can negatively affect overall productivity through directly reducing the number of hours actually worked or indirectly increasing labor cost. Third, although it is difficult to assert a one-sided relationship between working hours and the employment rate, from a long-term perspective, shortened working hours and an increase in the employment rate generally corresponded. Fourth, labor costs appear to be more closely related to hours paid for, which includes not only payment for actual work, but also payment for non-working hours, such as paid holidays and leaves. To properly understand the employment issues and the cost issues of companies, it is necessary to conduct regular and systematic surveys of hours paid for. Fifth, while countries use hours paid for or hours actually worked to calculate hourly wages depending on their needs, it should be noted that there exists a difference in the method of calculating the hourly wage of the minimum wage and the ordinary wage under a monthly wage system according to Korea's labor relations laws, which

may cause confusion.

III. Current Status of Hours Actually Worked and Hours Paid for

In order to understand the actual status in the number of hours actually worked and hours paid for, this section explores the implementation status of working hours and the holiday/leave system by referring to the survey data between July~August 2021 for manufacturing businesses employing 5 or more employees. The major analysis results are as follows.

First, focusing on the implementation of working hours, we reviewed the usual number of working days per week, whether there is usual overtime work, whether a fixed OT system is in operation, and how to compensate for overtime work in excess of the fixed OT. Among the firms surveyed, 88.8% of them reported that the usual number of working days per week is 5 days; 76.0% of them said there is usual overtime work; 46.2% of them had the inclusive wage system in place; and 60.0% offered monetary compensation for overtime work in excess of the fixed OT. In particular, monetary compensation for usual overtime work or overtime work in excess of the fixed OT appears to be higher in larger firms and unionized firms. On the other hand, smaller companies and non-unionized firms are more likely to have the inclusive wage system and offer no separate compensation for overtime work in excess of the fixed OT.

Second, we also considered the actual contractual working hours, actual overtime hours, fixed overtime hours, if the weekly holiday is paid for (and if so, the number of hours paid for but not worked), and if a non-working day other than the weekly holiday is paid for

(and if so, the number of hours paid for but not worked), surveyed and analyzed by wage calculation system (usually hourly or monthly wage system). Almost all companies reported 40 hours of contractual working hours per week, 3.8 hours of overtime per week on average, and 1.6 hours of fixed overtime per week on average. All of them responded that 8 hours were paid for on the weekly holiday. 6.1% of the respondents said they have a paid non-working day other than the weekly holiday (usually Saturday), and the average number of hours paid for but not worked is 5.2 hours. Also, the number of monthly working hours for calculating the ordinary hourly wage, that is, the monthly contractual working hours, is reported to be an average of 212 hours. Breaking this down by wage calculation system, those with the hourly wage system tend to have longer overtime hours, application of paid non-working days, and the number of hours paid for but not worked, while those with the monthly wage system have longer fixed overtime hours. In particular, the ratio of companies with a paid non-working day other than the weekly holiday is higher in larger companies and unionized firms.

Third, we analyzed the operation of the annual holiday system by examining public holidays, the weekly holiday, statutory holidays such as Labor Day, and contractual holidays such as company/union foundation day, and extra days added to national holidays. It was found that Lunar New Year and Chuseok holidays were paid in all companies; public holidays other than Lunar New Year and Chuseok holidays in 91.1~96.5% of the respondents; substitute public holidays, temporary public holidays, and public office election days in 76.8~78.5% of the respondents; the weekly holiday in all companies; and Labor Day in 98.1% of the respondents. However, in smaller

firms and non-unionized companies, the percentage of those implementing paid public holidays was lower. On the other hand, 27.3% of the respondents said that the company's foundation day is a paid holiday, and 50.9% of unionized firms responded that the union's foundation day is paid for up to 8 hours a day. The ratio of those implementing these two holidays was also found to be higher among larger firms and unionized firms.

Fourth, continuing to analyze the implementation of the annual holiday system, we looked at annual leaves, other statutory leaves, and contractual leaves including summer vacation, congratulatory and condolence leave, sick leave, etc. It was found that annual leaves were paid in almost all companies, maternity leave in 50.5% of companies, family care leave in 39.8% of companies, menstrual leave at 8.7% of companies, and reserve military or civil defense leave at 93.6% of companies. In particular, the promotion of the use of annual leave is higher for non-unionized firms or larger firms, and the paid ratio of various statutory leaves other than annual leave is higher for larger workplaces and unionized firms.

Finally, based on the above analysis of the operation of the working hour system and the annual holiday system, we examined the number of annual paid holidays or leaves (in days), and the number of annual hours actually worked and hours paid for. The average number of paid holidays or leaves per year is 93.4 days, of which 69.5 days are statutory holidays, 0.6 days are contractual holidays, 13.3 days are statutory leaves, and 6.2 days are contractual leaves. It is estimated that the number of non-working days other than the weekly holidays is 3.7 days per year; the total number of hours actually worked is 1,951.5 hours; and the total number of hours paid for is 2,698.5 hours.

IV. Implications

Working hours is a basic statistic that is essential for compiling various labor market indicators such as hourly wage, hourly labor costs, unit labor costs, and labor productivity. It is an indicator of short-term fluctuations in labor demand, and a crucial data for studying workers' working conditions, living standards, and quality of life. The International Labor Organization and statistical authorities of each country compile or measure working hours using the household or business survey data or administrative data, but there are differences in the scope, items, subjects, and frequency of statistical surveys. In Korea, not only the legal definition of working hours and the industrial practice in the field often cause confusion, but also various statistical surveys have differing concepts of working time. Therefore, it is necessary to explicitly define the concept of working time for accurate identification of working hours and international comparison, and to establish and utilize the working hour indicator based on such concept.

This study defines the concept of working time systematically in accordance with international standards, and by clarifying the difference between various concepts of working time, it establishes a theoretical basis that will enable systematic analysis of working hours. In addition, by systematically examining the recent number of hours actually worked and hours paid for, as well as their gap (that is, the actual status of paid holidays or leaves), this study not only satisfies various policy demands for employment and labor statistics, but also provides basic statistics that can be used to estimate future wages and labor cost structures, unit labor costs, and labor productivity.

In particular, for the first time in Korea, this study

surveyed the number of hours included in paid holidays or leaves in manufacturing businesses employing 5 or more employees to estimate hours paid for, and showed that there is a difference between hours actually worked and hours paid for. According to the survey results, the annual hours actually worked was 1951.5 hours (243.9 days based on 8-hour workday) and the annual hours paid for was 2698.5 hours (337.3 days based on 8-hour workday). The difference between the two—that is, paid holidays or leaves—was 746.9 hours (93.4 days based on 8-hour workday).

As discussed in this study, hours paid for in addition to hours actually worked is an independently important variable in the relationship with various economic indicators. Moreover, despite the recent shortening of working hours, the spread of flexible working arrangements, and the expansion of various statutory paid holiday or leave systems, the gap between hours actually worked and hours paid for is likely to widen depending on the differing characteristics of firms such as payment ability, bargaining power, legal compliance and coercive power. Therefore, it is necessary to investigate both the number of hours actually worked and hours paid for at the same time in order to understand the changes in economic indicators in the future and to establish and evaluate policies to reduce the gap between workers.

To this end, in order to more accurately understand the wage structure of workers, the structure of companies' labor costs, and the wage rates of the ordinary hourly wage, it would be necessary for various existing survey statistics to include survey items not just to find out hours actually worked but also hours paid for, especially the actual status of holidays paid for but not worked. It would also be necessary to conduct a separate survey of all industries including the manufacturing industry.

In addition to making the above statistical improvements, additional research is required on how the shortening of hours actually worked due to the expansion of statutory paid holidays or leaves affects labor cost, employment, and productivity. In particular, Korea is currently in danger of a rapid population decline, so productivity improvement is one of the most pressing tasks to alleviate or delay the growth slowdown. In particular, how the level of hours paid for and the widening or narrowing of the gap between hours paid for and hours actually worked affects productivity will be a meaningful research topic. However, as there is insufficient domestic data to analyze this statistically, it would be necessary to explore the cases of other developed countries.

So far, this study has come up with theoretical implications, significant fact findings, measures to improve survey statistics, and also presented future research tasks. In addition, it seems that appropriate policy responses to the following findings are needed.

First, according to the survey results of this study, the larger or the more unionized the firm is, the higher the number of paid holidays or leaves per year. As a result, the gap between hours actually worked and hours paid for is wider for large businesses and companies with unions. Such a gap depending on the company size or the presence or absence of a union is caused by the difference in contractual paid holidays or leaves agreed upon by labor and management rather than statutory paid holidays or leaves. This shows that the compensation gap for hours actually worked exists depending on the company size or the presence or absence of a union, and this is one of the reasons for the dual structure of the labor market. Therefore, considering the results of this analysis, it would be desirable to consider policy alternatives to narrow the

gap in hours actually worked and hours paid between large enterprises and SMEs and between non-unionized firms in order to alleviate the labor market gap.

Second, it is important to secure uniformity in legal interpretations of contractual working hours. According to the case studies through site visits and the statistical survey, the concept of contractual working hours is used differently on a weekly and monthly basis in industrial sites. Both forms of survey calculated the weekly contractual working hours as 40 hours per week based on hours actually worked, but calculated the monthly contractual working hours to be 209 hours based on hours paid for including paid weekly holidays. Such conceptual inconsistency in defining contractual working hours can cause confusion and labor-management conflict because wages are calculated using different standards if contractual working hours are used. To prevent such confusion in advance, it would be necessary to clarify the legal interpretations of contractual working hours, that is, whether the legal concept of contractual working hours is based on hours actually worked or hours paid for. Along with the effort to clarify the legal interpretations, it is also crucial to survey statutory or contractual hours paid for but not worked to identify hours paid for.

Third, in addition to the recent shortening of working hours and the adoption of flexible working arrangements, the government has expanded its work-family balance policies such as the application of statutory holidays of government offices to private sector employees, maternity leave, and family care leave, etc., all of which are being phased in by company size. To enhance compliance in this regard, the government would need to step up its public relations effort, informing the public of the policy implementation period and policy contents.