



2021  
Research Paper-23

# Korean Women Manager Panel

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Korean Women's Development Institute

## **Korean Women Manager Panel**



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### I . Introduction

#### 1. Research Purpose and Necessity

##### 1) Academic Purpose and Necessity

The Korean Women Manager Panel Survey (KWMPS) was initiated with a problem awareness that it is necessary to devise a policy to increase the number of women managers. This necessity goes beyond simply identifying discrimination against women in the labor market and raising women's employment rates. There have been similar panels to this panel, such as the Human Capital Corporate Panel, the Workplace Panel, and the Korean Labor & Income Panel. But as these panels have established their database from all workers, workplaces, or households, they are not so structured as to track individual female managers' workforce participation, including entry to and drop out of the labor

market. This KWMPs is the single survey at home and abroad that enables us to identify female managers' working conditions by observing their recruitment and career growth in the workplace. Not only that, the survey makes it possible to capture their career development process, working conditions in the workplace, organizational culture, practices of promotion to managerial positions, or obstacles to promotion.

Since its initial survey in 2007, the KWMPs has followed up the current situations of human capital and female managers' working conditions in the private sector over the past 12 years. The survey has also continually grasped changes related to organizational culture in the workplace, practices of gender-based discrimination against women, and work-life balance in Korean society.

The data from this survey will be used largely by researchers in the academic community and research institutes. Policy makers in the government ministries as well will use the data. In particular, researchers in diverse fields have taken continuous interest in the survey data. Accordingly, they have used the data for studies on glass ceiling issues, the roles of enterprises and society related to women's career break, and determinants of female managers' promotion.

To share and spread the results and achievements of the KWMPs, we held symposiums seven times and academic conferences twice. Using this survey data, we also provided annual rudimentary analysis reports and research papers and theses on the website. Specifically, through the survey, we presented 75 research results in the symposiums and conferences. We also registered 63 theses in academic research foundations as research materials, thereby attaining academic achievements. The themes studied the most included work-life balance, work to family transfer, and family-friendly systems. These themes were

followed by satisfaction and commitment (workplace satisfaction, organizational commitment, life satisfaction, etc.) and career-related topics (career success, career commitment, career aspiration, etc.).

The KWMPs has a high practical value as it simultaneously surveyed female managers in applicable enterprises throughout all industries. Also, the survey collected in-depth data through human resource staff, including the general status, personnel, human resource management system, and flexible work arrangements of those enterprises. Using the data piled up over the past 12 years, the survey identified changes in human resources administration system, practices, work-life balance system, and organizational climate. On top of this, it also confirmed how these changes actually contributed to the diversity of the composition of human resources in the organization.

Since the second-cycle survey in 2020, the survey has added items such as the way enterprises work and their organizational climate. Through the addition, the survey has enabled organizational assessment and comparison with similar enterprises. As it also has enabled gender comparison of managers, the survey can be used as important information in reviewing corporate support systems and programs by group. For public relations, we held symposiums and forums for enterprises and managers. We also provided the survey results of analyzing characteristics of each enterprise in the form of panel brief, so that enterprises can approach this survey with interest. This survey has great potential and irreplaceability because there is no similar overseas parallel. As such, it is necessary to consider performing international public relations as well.

## 2) Policy Purpose and Necessity

The Korean Women Manager Panel Survey is the only panel survey of women in the labor market. The survey initially began with the name “Women Human Resources Panel Survey 2007.” Its goal was to accumulate rudimentary data to develop policies that can support women’s career building in enterprises. Public recruitment of female undergraduates began on a large scale in the 1990s. Since then, the labor market in Korea has seen rapid changes in gender-related environment over the past three decades. In this context, the first-cycle KWMPMS has built up significant data that contain these changes.

According to the continued conduct of the first-cycle survey over a decade, we confirmed that many panel members dropped out of the survey due to retirement. This demonstrates how difficult it is for women to retain their careers. In this situation, it is necessary to connect the survey data with policies and raise its policy use to enhance representation of women in the future. As the KWMPMS focuses on supporting female managers’ career development in firms, the survey is directly related to policies. For example, related policies include i) the Affirmative Action implemented by the Ministry of Employment and Labor, ii) the Partnership for Gender Equality and Inclusive Growth, iii) the Academy for Talented Women, and iv) Women in Innovation (WIN). The latter three policies were implemented by the Ministry of Gender Equality and Family. Therefore, it is necessary to directly link the survey data for these policies. It is also necessary to actively publicize the possible use of this survey to the ministries in charge of these policies.

## 2. Research Method and Content

### 1) Main Research Content: 2007–2019

The Korean Women Manager Panel Survey had been conducted biennially until the 2018 survey. The subjects of the survey included female managers, including assistant managers and above positions who worked in enterprises with 100 employees and more as well as HR staff in the enterprises. The areas surveyed consisted of personal, organizational, situational variables affecting female managers' career retention, career development and promotion in the companies, career changes and interruption, and work-life balance. In particular, the survey focused on revealing the situation female managers were in by identifying various situational factors affecting women managers. The 12-year survey since 2007 clearly showed the situation in which female managers had difficulty retaining their careers. The reasons for the difficulty included the burden on family support and child care, low wage, work history with low-quality jobs, and inadequate systems in the organization that made work-family reconciliation difficult. The survey also accumulated sufficient data to support causes for their career breaks. In 2007 when planned, this survey began with 2,361 female managers and four types of industry, including manufacturing, wholesale and retail, financial, and business services as its subjects. In 2012, the survey expanded its subjects to female managers, including assistant managers and above ranks, in 4,078 businesses with 100 employees or more through all industries. The survey was conducted every other year to complete its seventh wave in 2018.

The sample retention rate of the Korean Women Manager Panel Survey has gradually decreased. As the rate of its fourth-wave in 2012 dropped

to 61.0%, we added a new panel of 918 persons to the survey. As the sample retention rate of 2018 fell to 44.7% from the panel of 2007, and to 75.4% from the panel added in 2012, we once more added a new panel of 1,022 persons. Through the addition of new panels twice, the panel surveyed for the seventh wave in 2018 reached 2,699 persons.

In 2019, we completed the first cycle of seven waves until 2018. We then conducted a self-review of the limitations and panel data of the 12-year survey. In other words, focusing on planning further advanced KWMPs, we reviewed problems of the panel that had been managed and retained until then. We discussed additional recruitment of panel members to make up for the panel attrition. We also identified issues over analysis data that were difficult to be sufficiently provided in relation to studies on representation of women managers. We reviewed various solutions to the limitations of the first-cycle survey and decided on the direction and composition of the second-cycle survey. We held expert forums and symposiums 12 times to incorporate diverse opinions and counsels in planning the second-cycle survey. By reducing its question types largely to three and planning the survey content anew, we changed the questionnaire for the second-cycle survey and henceforth. To change the content composition of each question type, we had workshops nine times on the questionnaire for researchers and advisers. Through the workshops we made efforts to grasp new issues and reflect them in the questions of the second-cycle survey.

## 2) Main Research Content: 2020

The Korean Women Manager Panel Survey in 2020 marks the first year of the main second-cycle survey that was newly planned in 2019.

In 2020, 13 years have passed since 2007 when the first-cycle survey was planned. The 2020 second-cycle focuses on the competencies and roles of new managers currently required in the changed labor market since then. The second-cycle survey plans to track career path through which women managers have achieved career success in the organization. The purposes of this survey include: first, to identify women's participation in the labor market; second, to produce rudimentary policy data to secure diversity in the labor market; third, to generate rudimentary data to analyze various changes in women's work related to social changes.

We planned and conducted a new survey to complement the inherent limitations of the existing survey. Through this survey, we made four major changes: first, the content of the second-cycle survey aims to collect data to prepare ways for women's career success, focusing on women's competencies. These competencies include their skill, career, leadership, network, mentor, career goal, and influence in the organization. The competencies have a direct impact on women's career retention and success. Second, because the existing survey had only female managers for its subjects, it was impossible to conduct a comparative analysis of them with male managers. As such, the second-cycle survey has established panel data that enable the comparative analysis of female managers with male managers. When this condition is met, it is possible to clearly identify the problems facing women managers and to promptly connect the data with feasible support policies. Third, this survey reflects substantial changes. Such changes include women's positions in Korean companies, systems in the companies, and corporate culture that have occurred for about 13 years since 2007, when the existing survey was initially designed. In particular,

the subjects of the existing survey included assistant managers and above positions in the enterprises in 2007. But the proportion of female managers and above positions has fairly increased in the second-cycle survey and their titles have diversified in each enterprise. Accordingly, this survey selected commonly-called “managers” and above positions, or women in managerial positions, for its subjects. Fourth, the existing survey was biennially conducted, with a main survey in one year and a survey for retention in the other. The cost for the survey for retention was not much different from that of the main survey. Also, the biennial survey had a high dropout or attrition rate. We expected that women managers’ career process will become more dynamic in the future. As such, we changed the method of conducting the survey from biennial to annual in order to raise the panel retention rate and to conduct the survey in a stable manner.

### 3) Data Release and Use

The Korean Women Manager Panel Survey releases raw data and all related data on the homepage of the Korean Women Manager Panel. As of 2020, the survey provides 27 types of data, including 8 raw data of the first- to seventh- wave survey data, 8 data-related materials, such as questionnaires and code books, and 11 annual reports.

As of October 2020, using this survey we presented 75 research results at academic conferences and symposiums. We also presented 72 theses that were registered at National Research Foundation of Korea. The 72 theses included 61 theses on women managers’ careers, 33 theses on corporate culture such as organizational culture, training, and human capital management, and 31 theses on work-life balance system.

#### 4) Composition of the Report

With 2020 marking the first year to commence the second-cycle survey, this report contains all the processes and results of conducting the survey this year as well as the analysis and use of the survey data. Also, the report demonstrates our efforts to contain enough content in its composition of six sections, so that readers can find the achievements of the KWMPs, present situations, and future plans.

## II . Overview of the Research in 2020

### 1. 2020 Research Achievements

#### 1) Main Tasks of the 2020 Korean Women Manager Panel Survey

- ◆ Held workshops on the 2020 Women Manager Panel
- ◆ Held a meeting to report the launch of the survey
- ◆ Held a meeting to review questions and content of the second-cycle survey
- ◆ Conducted the 1<sup>st</sup> preliminary survey
- ◆ Conducted the 2<sup>nd</sup> preliminary survey
- ◆ Held an assessment meeting to select a service provider for the 2020 KWMPs
- ◆ Held an interim report meeting
- ◆ Published the seventh-wave first-cycle KWMPs in English
- ◆ Completed the approval of changes in statistics of the second-cycle KWMPs

- ◆ Commenced the inspection of the 2020 KWMPs
- ◆ Participated in the survey of National Statistics Utilization Indicators.
- ◆ Performed the duties of Statistics Korea related to the first-cycle KWMPs
- ◆ Provided on-site support for the Self-Assessment of Statistics Quality

## 2) Made a New Homepage and Reviewed Data Standardization

- ◆ Made a new homepage for the 2020 Korean Women Manager Panel Survey and conducted a maintenance work.

We established a new homepage (<https://kwmp.kwdi.re.kr/>) based on the latest sources to make it easy to maintain and manage the homepage in the future and applied a high-level security system. Also, by enabling web and mobile services, we will actively use the homepage in conducting the survey and public relations.

- ◆ Commenced data standardization

The first-cycle survey data frequently have different variables for each wave, and identical variables are not matched. As such, it is difficult to conduct a longitudinal analysis. moreover, as we have found a number of logical errors from the survey data, it is necessary to conduct data cleaning and standardization. Therefore, by reprocessing and standardizing the first-cycle survey data, we plan to release the standardized raw data for users in December 2021.

### 3) Held Forums and Expert Symposiums for the 2020 Korean Women Manager Panel Survey

- ◆ Held forums and symposiums, focusing on the improvement of the low panel retention rate and the promotion of public relations.

We had forums twice for male and female managers and human relations staff in the enterprises. In particular, we reviewed question items from the perspective of male managers. We conducted free discussions on how to retain and improve the panel as well as on practical ways to maximize the effect of public relations about this survey. We thereby laid the foundation for building positive rapport. For symposiums, we invited experts from outside to discuss the overall issues of the survey, focusing on the data verification of the second-cycle survey.

## 2. Overview of the First-Wave Second-Cycle Korean Women Manager Panel Survey

### 1) Sampling Design

The subjects of the second-cycle Korean Women Manager Panel Survey include male and female workers whose positions are managers or above in businesses with 100 regular workers or more. The essential subjects of the KWMPs include female workers in the position of manager or above, while male workers are surveyed for comparison with female workers. Accordingly, samples are selected from female workers in the position of manager or above in sample businesses. On the other hand, samples for male workers are limited to the same positions as those of female managers.

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Because there is no separate sampling frame for the subjects of this survey-male and female workers whose positions are managers or above in businesses with 100 regular workers or more-it is necessary to identify the subjects based on the results of the first-phase sample survey by applying the two-phase sampling method. It is also necessary to survey male and female workers specifically in the position of manager and above through the second sample survey. The sampling frame of this survey includes businesses with 100 regular workers or more among the National Business Survey prepared as of the end of December 2017 and all the businesses that employ 100 regular, temporary, or daily workers or more in all industries. The frame excludes public administration, national defense and social welfare (O), domestic service (T), and international organizations and other foreign institutions (U).

The basic principle for sampling is to select male and female managers in the position of manager or above who work for enterprises with 100 regular workers or more. As such, the first sampling unit of this survey includes enterprises, and the second sampling unit includes workers in the position of manager or above. The register of the National Business Survey contains no information on the current status of workers in the position of manager or above. For this reason, it is necessary to survey businesses to confirm such information, and then to take samples of workers in the position of manager or above. Therefore, by applying the two-phase sampling, we first of all identified the current situation of workers in the position of manager or above. We then selected workers in the position of manager or above through the second phase samples.

This survey calculates weights using design weights that correct the difference of sampling rates in the sampling design process. The survey then goes through non-response adjustment that adjust non-responses of

sample enterprises in the actual inspection process. It also employs post-stratification adjustment that uses the latest information on the population. In this survey, targets for estimation are largely population means or ratios. We used weights and then estimates for the estimation of various population means or ratios.

## 2) Survey Method

We began to conduct the second-cycle survey after completing the approval procedure of statistical changes regarding the newly planned questionnaire. This survey proceeds first with selecting businesses, then with conducting a questionnaire survey of male and female managers and human resources staff. As such, we conducted the survey in two phases: first, we contacted HR staff in businesses, and then in cooperation with them, we surveyed workers in the position of manager or above in the businesses.

## 3) Composition of the Questionnaire

While maintaining HR staff types, we revised and complemented their content. Not only that, we revised and newly planned persons with continued service, newcomers, and persons who changed their jobs by integrating them into manager types. We also decided to track types of the unemployed, business founders, and other workers once by newly creating them as the dropped-out types. As the survey in 2020 was the first wave, we did not use the questionnaire for the dropped-out types. Therefore, we did not present the composition of the questionnaire for the dropped-out types. For the questionnaire for male managers, we used the questionnaire for manager types in the same way as the questionnaire for female managers.

The questionnaire for HR staff types comprise a total of 52 questions, including 13 general questions, 15 questions on human resource management, 8 questions on the way of working and culture, 9 questions on maternity & paternity protection and work-life balance systems, and 7 questions on work force. The questionnaire for types of persons with continued service consists of a total of 76 questions, including 2 questions on career retrospection, 13 questions on current workplace, 5 questions on organizational culture, 16 questions on relationship and network in the workplace, 10 questions on career development and leadership, 10 questions on maternity and paternity protection, and 20 other questions. The composition of the questionnaire currently includes issue questions of the year 2020 related to COVID-19. Issue questions comprise important issues of the year when we should grasp the perceptions of managers.

### III. Characteristics of the First-Wave Second-Cycle Panel and Issue Analysis

#### 1. Characteristics of New Panel Respondents

When we examined characteristics of the first-wave second-cycle panel, mine and manufacturing accounted for the largest portion of the types of industry. Managers made up the largest proportion of the position. Incheon and Gyeonggi Province occupied the largest area of the place of residence. Also, enterprises with 100 to 199 employees accounted for the largest of the workplace. Because the panel consisted of managers or above positions, the panel was highly educated: over 61.0% graduated from universities and about 29.1% graduated from

graduate school or higher educational institution. Of the panel, approximately 74.4% had a spouse, and approximately 97.4% were regular workers. The current workplace of about 62.9% of the panel was not their first job, and about 31.5% had assigned positions. Because there was a gender difference in all the characteristics of the panel, it will be interesting to conduct a comparative analysis of the gender difference hereafter. When we looked into characteristics of businesses, the largest number of businesses were located in Seoul. About 80.4% of the CEOs were male and 58.9% of the businesses were managed by their owners. Approximately 20.8% of them received family-friendly enterprise certifications.

## 2. Issue Analysis: Perceptions of COVID-19

Regarding the COVID-19 pandemic situation, the largest number of businesses responded to the situation through flexible work arrangements. They had positive perceptions of productivity from such arrangements. Nevertheless, about half of them thought it difficult to have meetings or cooperation. A considerable number of them responded that they thought it inconvenient to change the work pattern. Compared to their male counterparts, female managers had relatively low perceptions of the difficulty of performing their duties. But they had very high perceptions of the burden on child-rearing and caring. We also found that they had difficulty retaining their careers. As for changes in the way they work, the changes they expected most included system changes for remote work and changes in the management's perceptions of flexible work arrangements. Due to the pandemic, both male and female managers' network activities decreased. HR staff's perceptions of the pandemic situation were not different from those of male and female managers.

## IV. Data Analysis and Self-Verification of the First-Wave Second-Cycle Panel

As 2020 was the first year of the survey, it was necessary to review the verification and use of the new survey content as well as the composition of the questions. Accordingly, using the data from the currently completed survey, we conducted an analysis of the questions to be used afterward. For the analysis, we divided the newly-planned content of the questions into research themes in business administration and sociology, focusing on the comparative analysis of managers by gender.

### 1. Analysis of Research Themes in Business Administration and Data Verification

Most questions needed specifying to the “current workplace.” By clarifying the definition of promotion, it was necessary not to include relocation or demotion in the same position. It was also necessary to ask questions focusing on whether respondents used maternity or child care leave in the present workplace. Questions on the current workplace information should be further specified. Because there was a fairly big difference in the content of responses between managers with continued service and HR staff, measures for enhancing the reliability of responses should be prepared. Regarding wages, it would be better to ask additional questions about the portion of job-based or seniority-based elements. Questions on leadership needed improvement toward more comprehensive ones. As for the work-life balance system, it was necessary to distinguish the periods in terms of whether the system was adopted before or after the outbreak of COVID-19. To promote the policy use of data, it was

necessary to make a distinction between public and private sectors when it comes to data on enterprises.

## 2. Analysis of Research Themes in Sociology and Data Verification

According to the result of performing an analysis by research theme, the second-cycle data maintained similar tendencies to the first-cycle data. Also, the second-cycle data maintained the strong points of the first-cycle data in that it was possible to analyze main themes. With the addition of comparative analysis by gender to the second-cycle survey, the data will be used much more. In particular, the second-cycle data will be suitable to be used as supporting data for policies to eliminate discrimination and enhance equality.

## V. Longitudinal Data Analysis of the First- to Seventh-Wave First-Cycle Survey

### 1. Demographic Characteristics and Changes of the First-Cycle Panel

Overall, the average age of the panel respondents and the proportion of the married continued to go higher. The portion of respondents with educational level of holding a master's degree or above steadily increased. There was a big difference in the possible panel attrition between industries to which the workplace of respondents belongs. There was also a very high attrition rate in the industry type with a high labor flexibility, such as accommodation and food services. In addition, the

higher the age of respondents, the lower their annual pay, and the more educated, the higher the possibility of panel attrition was.

According to the result of analyzing the determinants of women managers' promotion, industry types or geographical location of the businesses did not act as the determinants of respondents' promotion. However, when their final education level was higher, the possibility of their promotion sharply increased. Their childbirth was a factor seriously reducing the possibility of their promotion. Holding job duty-related certificates or having a mentor in the workplace was not a determinant of promotion. However, improving foreign language skills, obtaining certificates related to the current work, acquiring a higher degree, and human networking were factors significantly raising the possibility of their promotion.

## 2. Characteristics of Female Assistant Managers in the First-Cycle Panel<sup>1)</sup>

Because the second-cycle survey did not include female assistant managers in its subjects, we analyzed characteristics of women in the position of assistant manager in the first-cycle survey. Only 31.0% of them had continuous service for 12 years. Of this figure, a mere 11.0% had an average promotion to general managers or above for 12 years. One of the reasons that included female assistant managers in the subjects of the first-cycle survey was to keep track of their career formation process. But they had actually a low rate of continuous service, and only a very low proportion of female assistant managers with continuous service achieved an average promotion. However, we found

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1) For the panel retained as a result of the seventh-wave panel survey among the subjects of the survey who were assistant managers in 2007.

that the possibility of their promotion rose when the age of female assistant managers was higher, when their education level was higher, when they had a mentor, when they had longer overtime work, when the proportion of women in their team was higher, and when their supervisors had gender-equal evaluation or rating of their merits.

## VI. Summary and Future Plan

### 1. Summary and Implications of Data Analysis Results

We completed the first-wave second-cycle survey of a new panel of 5,000 managers, including 3,500 female managers and 1,500 male managers. After completing the survey, we will conduct data cleaning and then standardization. We plan to provide the standardized first- and second-cycle data for users on the homepage of the Korean Women Manager Panel Survey in December 2021.

Regarding the COVID-19 situation, women managers had an additional burden on child-rearing and care and had difficulty retaining their careers. In spite of this, positive changes are expected from the situation in terms of corporate or managerial culture.

According to the results of analyzing the first- and second-cycle data, we identified issues for each question that should be completed and improved. We plan to reflect them in the next-year survey. We also found that the second-cycle data maintained the strong points of the first-cycle data. Therefore, the second-cycle data had an additional advantage of enabling gender comparison while securing the identity of the survey.

As a result of our longitudinal analysis of the first-cycle data, we identified determinants of female managers' promotion as well as characteristics of female assistant managers and factors influencing their promotion. The survey showed that individual female managers should develop their careers in the direction of acquiring a higher degree, having longer overtime work, and strengthening human networks. Its implication is that on the part of enterprises, it is necessary to guarantee representation of women and create a fair and just corporate culture.

## **2. Future Plan for Conducting the Survey and Principles for Tracking**

We researchers are currently preparing for standardization of the first-cycle data. By applying the results of self-data analysis and review to the questionnaire, we plan to conduct the second-wave second-cycle survey in 2021. We will also conduct the second-cycle survey of 5000 male and female managers every year. After conducting the survey, we plan to complete data processing and prepare rudimentary and in-depth analysis reports next year. Furthermore, we plan to have active public relations and to host symposiums and forums for the present data users.

The principle for tracking the panel is to track all the male and female panels when they change their jobs regardless of their changed businesses, positions, or job duties. When they resign and no longer belong to a company, we are to track them once by asking only the female panel to answer the questionnaire for the dropped-out. We will not track the dropped-out male panel. By annually calling the female panel members who have dropped out of the panel since the first tracking, we will confirm whether they are reinstated or reemployed. If

they are reinstated or reemployed, we will include them again in the panel. Because their changed companies are not samples for this survey, we will not ask additional questions of their HR staff.

Thematic classification of research performance catalogue:  
panel, labor and employment, representation

Key words: female managers, male managers, representation of  
women, women's career development, panel survey

