

2020 Korean Longitudinal Survey of Women & Families

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I . Introduction

1. Aims and Scope

As Korea becomes a low-fertility and ageing society and its family structure diversifies, the overall lives of its members have changed more than ever before. These changes have a greater impact on women's lives than men's because issues in women's lives are closely related to each other in various areas. For example, issues in women's economic activity are not simply related to a particular internal factor of the labor market, but they are also closely related to changes in external factors of the labor market, such as family type, the structure of decision-making in the family, and social and cultural perceptions and practices. At the same

time, formation and disintegration of a family, division of roles in the family, and changes in the perceptions and practices of roles in the family are deeply related to women's economic activity, including their participation in the labor market.

In general, a database on women's overall lives is established through a cross-section survey based on specific time points. However, because this method of building a database through a cross-section survey cannot control women's individual characteristics, it is difficult to exactly calculate the effects of variables concerned and thus has limitations in establishing and evaluating women's policies. For this reason, a database on changes in their individual lives should be established through a longitudinal survey.

A longitudinal analysis of changes in women's lives was already possible in existing panel surveys, including the Korean Labor and Income Panel Survey. However, most of these panel surveys did not consider gender characteristics in their design or lacked the number of women respondents. Therefore, they had limitations in conducting an in-depth analysis of women's unique experiences and sub-groups. Moreover, as these surveys were not equipped with question structures diverse enough to analyze women's lives, it was actually impossible to analyze women's lives from multiple perspectives.

As such, the Korean Women's Development Institute identified the need to overcome such limitations of existing longitudinal surveys, and began to conduct research in 2006 in order to establish a longitudinal database that complements them. Through this research, the KWDI performed its first-wave Korean Longitudinal Survey of Women & Families (KLoWF) in 2007. The KLoWF is a nationwide panel survey that investigates changes in women's lives by life cycle, family structure,

family formation process and daily living, life course and values, and jobs.

Beginning with its first wave in 2007 to survey samples of 9,997 women, ages between 19 and 64 years old, in 9,068 households across the nation, the KLoWF completed its second wave in 2008. Changing the cycle of the survey to every other year in 2010, the KLoWF completed its seventh wave in 2018. As of 2020, its eighth wave is under way. In this background, the KLoWF has been conducted with the following purposes in mind. First, this survey aims to identify characteristics of women's economic activity and the actual conditions of work and family reconciliation. Second, it is designed to empirically examine women's lives and to predict the future of families in Korean society. Lastly, by keeping track of changes in a wide range of important social issues in Korea, including low fertility, aging, work-family reconciliation, and family-friendly social environment, this survey aims to provide diverse preliminary data for the overall process of establishing and evaluating policies on women and families.

To achieve these purposes, the 2020 KLoWF conducted the main (first) survey of its eight wave and at the same time performed an in-depth analysis through rudimentary and longitudinal analyses using its data from the first to the seventh wave surveys. The KLoWF also released its established data to the general public, held academic conferences, and conducted research to promote the development of policies and its use.

2. Research Contents

1) Use of the KLoWF

Since its first wave survey in 2007, the KLoWF has conducted

preliminary and in-depth analyses based on the results of its annual or biennial surveys. To promote the policy and academic use of the KLoWF, we released the data primarily for experts and secondarily for the general public, held academic conferences, and hosted academic contest for graduate students. We also used the KLoWF for studies in various areas related to women as briefly summarized below:¹⁾

First, the KLoWF developed various policy and academic implications through its longitudinal analysis of women's lives. As of the end of May 2020, the KLoWF was used for a total of 503 studies, including domestic and overseas journals and academic theses and dissertations. Studies on women's economic activity accounted for the largest portion of 121 cases, followed by those on childbirth and care making up 109 cases, families 96 cases, health 86 cases, and work-family reconciliation 81 cases. This shows that the survey data was used in a wide range of women-related areas rather than concentrated on a particular area.

Second, the KLoWF was used as the KLoWF offered useful data for comparison data for comparison with other panels. Not only was it used for comparison with domestic panel data but also for a comparative study with the Australian Longitudinal Study on Women's Health,²⁾ to compare health conditions between Korea and Australia.

Third, the KLoWF provided the Korean government and research institutions with national data for gender equality and assessment data for gender equality policies, including policies on work-family reconciliation, women's economic activity, women's health, family, and low-fertility.

1) You can find the list of policy and academic research using the KLoWF on the Web site "Research Using the KLoWF" (<https://klof.kwdi.re.kr/portal/report/researchListPage.do>)

2) A comparative study was conducted as a cooperative research between the Korean Longitudinal Survey of Women and Families and the Australian Longitudinal Study on Women's Health in 2016. This study was published as a report titled "Comparative Study between Korean and Australian Panel Surveys on Women's Health."

Fourth, the KLoWF was used in identifying various aspects of Korean women's lives through academic conferences, including 12 domestic academic conferences and 2 international academic conferences since 2008.

2) The 2020 Research Contents

The major research contents of the 2020 KLoWF include the following:

First, we completed the main (first) survey of the eighth wave KLoWF. The eighth wave survey was conducted of 15,525 eligible female household members ages between 19 and 64 years old in 11,882 households³⁾ across the nation established in the seventh wave survey, plus split-off households and eligible household members of the split-off households that were newly added in the eight wave survey. In the eighth wave survey, we developed questions to identify “changes in women's lives due to COVID-19” by conducting an additional survey, in order to analyze the questions in connection with existing questions.

Second, we released the KLoWF data from its first to seventh wave surveys to the general public. We provided a combined service of the data by item and wave on the restructured website of the KLoWF. Also, we promoted user convenience by standardizing the panel data items to enable data combination in various forms. In addition, we prepared a user guide and provided statistical package labeling command statements and a code book to reduce the confusion of existing users.

Third, we held the 2020 KLoWF Symposium for experts and the

3) The sum of the 9,787 original and split-off households established in the first wave in 2007 and 2,096 new and split-off households added in 2017. For details, refer to the survey overview in the next section.

Thesis Contest for Graduate Students. The symposium prepared a platform to discuss diverse topics to develop policies in a timely manner. The Thesis Contest offered a venue for policy and academic discussions to promote the use of the data and identify new research themes.

Fourth, we conducted an in-depth analysis together with a preliminary analysis based on the results of the first to seventh wave surveys. The in-depth study analyzed women's lives, economic activity, health, and so on, using the latest KLoWF data and presented implications of them.

Fifth, we published a working paper that contains analyses of latest issues and studies on policy effects using the KLoWF data.

Lastly, we managed the KLoWF website in Korean and English, translated various types of data and guidelines into English, held a KLoWF forum to empower researchers, and hosted a panel data workshop to provide information for the KLoWF users and to make the use of data more convenient.

3. Overview of the Eighth Wave KLoWF

1) Subjects of the Survey

The subjects of the eighth wave KLoWF include the following:

First, the existing panel consisted of 12,904 female eligible household members, ages between 19 and 64, in 9,787 households nationwide surveyed from the first to sixth wave surveys, plus the split-off households and eligible household members of the split-off households after the seventh wave. Specifically, the households included 9,068 original households surveyed in the first wave, 100 split-off households in the second wave, 161 split-off households in the third wave, 148

split-off households in the fourth wave, 129 split-off households in the fifth wave, 105 split-off households in the sixth wave, 76 split-off households in the seventh wave, and split-off households in the eighth wave. The 12,904 female eligible household members included 10,446 female household members ages between 19 and 64 in the 9,787 households, 2,132 household members who were excluded from the surveys of existing original eligible household members, 311 new eligible household members who became 19 due to an increase in age in the sixth wave survey, and 15 new eligible household members who entered the households in the seventh wave survey. Also surveyed were new eligible household members who became 19 and eligible household members of the split-off households in the eighth wave survey.

Second, the subjects of the eight wave survey comprised 2,096 households, including 2,049 households that were newly added in the sixth wave survey and 47 split-off households in the seventh wave survey, plus the split-off households after the seventh wave. Also surveyed were 2,621 female original eligible household members and eligible household members of the split-off households after the seventh wave. Specifically, the 2,621 female original eligible household members included 2,531 female original eligible household members from the sixth wave survey, 76 new eligible household members who became 19 due to an increase in age in the sixth wave survey, and 14 new eligible household members who entered the households in the seventh wave survey.

The new panel was added to secure representation of the 2017 KLoWF and to take into account the dropout level in the follow-up surveys in the future. The follow-up surveys of this new panel will be conducted in the same way as with the existing panel by tracking the split-off households.

〈Table 1〉 Subjects of the eighth wave survey

Survey subjects	Existing panel	Added panel
Households	9,787 households plus the split-off households in the 8 th wave	2,096 households plus the split-off households in the 8 th wave
Eligible household members	12,904 persons plus eligible household members of the split-off household in the 8 th wave plus eligible household members due to an increase in age	2,621 persons plus eligible household members of the split-off household in the 8 th wave plus eligible household members due to an increase in age

2) Sampling and Survey Methods

The population of the KLoWF was based on approximately 260,000 enumeration districts (ED) of the 2005 Population and Housing Census with the following sampling methods:

“For the primary sampling units (PSU), 1,700 EDs were selected from the EDs of the 2005 Population and Housing Census by applying the probability proportional to size (PPS) sampling. This sampling method is to select EDs in proportion to the size of households in the EDs from the stratified EDs by city and by province using the urbanization level, the proportion of workers by industry, the proportion of households by housing type, the distribution of households by household members, the age of the head of households, and the gender of the head of households as variables.” In distributing the number of sampled EDs by city and by province, this survey employed the method of distribution in proportion to the square root of the household number by region rather than simple proportional distribution methods.

For the secondary sampling units (SSU), households were selected by systematic sampling from those who lived in the 1,700 EDs selected for the primary sampling units (Su-mi Park, et al. 2007). Although five

households were selected from one sampled ED through systematic sampling to survey female household members as the final targets, four to seven households were selected from each ED in this survey.

When it comes to the survey methods, the eight wave survey employed the method of tablet assisted personal interview (TAPI). The first to sixth wave KLoWF used the computer assisted personal interview (CAPI) based on the blaise program developed by Statistics Netherlands (Central Agency for Statistics). The seventh wave survey employed CAPI together with TAPI which surveyed 5 percent of the total panel. The TAPI introduced a Web survey program developed by Hankook Research. The survey method of TAPI has the strengths of high readability of the questionnaire compared to the existing blaise, being able to implement the question survey in various ways, and easy to use compared to laptops. The background to introducing TAPI in the KLoWF was to prepare for a changing survey environment. Just as the wave of the survey increased, so did the fatigue of the panel. Also, with a recent increase in one-person households, we judged it difficult to retain the panel through face-to-face interviewing only. As such, the KLoWF introduced part of the panel using TAPI in the seventh wave survey in order to prepare for a survey environment that we may encounter in the future by establishing in advance an environment that enables Web assess, then fully employed TAPI in the eighth wave survey.

3) Principles for Tracking and Succeeding to the Original Households

The KLoWF is an individual panel survey to track eligible household members of the original sample households from the first wave survey. The survey has principles for tracking as follows: First, as the KLoWF

tracks individual women who live in the households, we surveyed all original eligible household members ages between 19 and 64 in the first wave regardless of whether or not they were successfully surveyed, lived together, temporarily absent, or established split-off households in the following surveys. Second, for the new eligible household members who entered the households after the first wave survey, we surveyed only if they lived with the original eligible household members in the first wave survey (household members who lived together or were temporarily absent) and split-off households who were included in the original eligible households. Therefore, if they did not live together with the original eligible household members, this female panel was excluded from this survey.

As the KLoWF tracks not only the original sample households but also split-off households, the survey has principles for split-off households to succeed to the original households if eligible household members set up a branch family. In general, split-off households include any household if an eligible household member of the household moves out to form a branch family for the reasons of marriage, divorce, and financial independence. The subjects of the KLoWF are women, and this survey has principles for succeeding to the original households in the following order.

First, a woman who is the head of a household or the spouse of the head of a household among the original eligible household members succeeds to the original household. For example, if a mother, her son-in-law, daughter, and grandson live together, her son-in-law is the head of the household, and the mother and her daughter are surveyed as original eligible household members. Suppose that her daughter moved out with the son-in-law and that the mother came to live together with

her second daughter. In this case, the daughter who is the spouse of the head of the household succeeds to the original household and the mother is deemed to have established a branch family. Second, if the original eligible household member is not the head of a household or the spouse of the head of a household, a woman who is older in the household succeeds to the original household. For example, if two daughters who live with their father are eligible household members, the older sister succeeds to the original household.

4) Composition of the Questionnaire for the Eighth Wave Survey

The KLoWF is composed of questionnaires for households, individual women (existing, new), and jobs (existing, new). Likewise, the eighth wave survey has the same composition but includes an additional survey of respective areas of questionnaires for households and individual women. Specifically, the additional survey was conducted with a goal to identify changes in families and individuals of the panel, including changes in household income and spending, COVID-19 disaster reliefs, jobs, family relations, childcare, and perceptions after the COVID-19 pandemic.

To this end, we divided changes arising from COVID-19 into family relations and individual women's lives, and comprised questions in such a way that can bring meaningful outcomes when analyzed in combination with existing questions but does not overlap with them. To identify changes due to COVID-19, we asked questions about the experience of respondents from March 2020 to June 2020. We chose these time points for the comparison because there were big changes in family and individual lives during this period compared to that prior to March 2020.

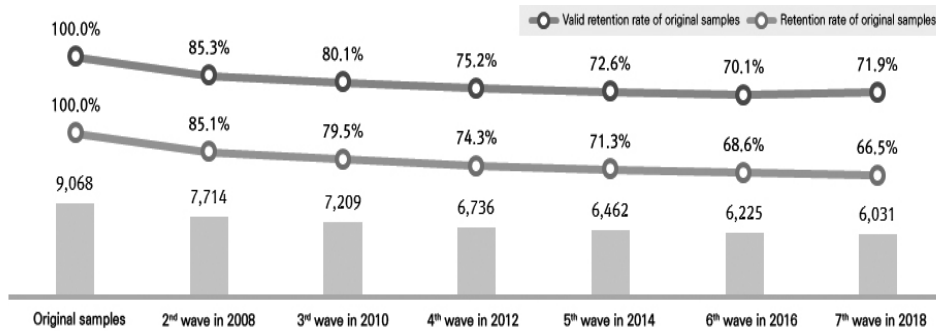
During the period, the World Health Organization officially declared the COVID-19 pandemic on March 11 and Korea as well took measures, including heightened social distancing.

〈Table 2〉 Composition of the eighth wave KLoWF questionnaire

Questionnaire		Area	Remarks
For Households		① Household members and family, ② Housing status, ③ Household income, ④ Household spending, ⑤ Assets and debts ⑥ Changes in family lives due to COVID-19 (additional survey)	
For Individuals		① School life, ② Confirmation of marriage experience, ③ Unmarried women, ④ Marriage and marital life, ⑤ Housework, ⑥ Husband's job, ⑦ Couple living temporarily apart, ⑧ Separated, ⑨ Divorced, ⑩ Widowed, ⑪ Pregnancy and childbirth experience, and family planning, ⑫ Children's education [preschool children], ⑬ Children's education [primary and secondary school ages], ⑭ Relationship with unmarried adult children, ⑮ Relationship with married adult children, ⑯ Relationship with my parents, ⑰ Relationship with husband's parents, ⑱ My siblings, ⑲ Husband's siblings, ⑳ Family-related values, ㉑ Health, leisure, life satisfaction, ㉒ Changes in women's lives due to COVID-19 (additional survey)	
For Jobs	Jobs (basic)	① Jobs I had during the last survey ② Jobs I still have since the last survey : wage workers, non-wage workers, special-type workers ③ Jobs I have quit now since the last survey : wage workers, non-wage workers, special-type workers ④ New jobs I have had since the last survey ⑤ New jobs I still have now since the last survey : wage workers, non-wage workers, special-type workers ⑥ New jobs I have quit now since the last survey : wage workers, non-wage workers, special-type workers ⑦ Current economic activity	
	Jobs (other)	⑧ Job-search experience ⑨ Job satisfaction ⑩ Education and training ⑪ Social insurance ⑫ Work and family life ⑬ Discrimination ⑭ Maternity protection system	

5) Retention Rate of Original Samples

The retention rate of original samples of the KLoWF is calculated based on valid samples. Valid samples refer to samples that excluded from the (9,068) original sample households those households that were impossible to survey for the reasons of death and missing, study abroad, long-term business trip, emigration, illness and accidents, or their request to drop out of the panel. Therefore, the final valid retention rate of original samples in the seventh wave was 71.9%. The valid retention rate sharply dropped to 85.3% in the second wave survey, to 80.1% in the third wave, and to 75.2% in the fourth wave, approximately 5 percentage points down every year. However, the retention rate fell by a mere 2.5 percentage points in the sixth wave from 72.6% in the fifth wave, showing that the rate gradually entered a stable phase. When examined by the retention rate of original samples, the retention rate of the seventh wave survey was 66.5%, 5.4 percentage points down from the valid retention rate of original samples. This is a big difference from 1.5 percentage points down from the valid retention rate of the sixth wave. This is because the seventh wave survey excluded those who strongly refused to the survey to the extent of accusation or charge or those whose address or contact number could not be confirmed for six years or longer as households that were impossible to survey.



[Figure 1] Retention rates of household samples by wave

II. Preliminary Analysis of the First to Seventh Wave KLoWF

1. Changes in Women's Lives and Values

1) Unmarried Women

When asked about their intention to marry, 31.4% of unmarried women answered that they had intention to marry in the seventh wave, down almost half from 62.0% in the third wave survey. The proportion was highest at 65.7% in the fourth wave, but then steadily decreased to 59.8% in the fifth wave and 42.0% in the sixth wave. The proportion of unmarried female respondents with marriage intention did not increase at a faster rate than that of those without such intention decreased, but it rose to 30.7% in the seventh wave from 22.2% in the third wave. Meanwhile, the proportion of female respondents who had never thought of marriage sharply rose to 37.9% in the seventh wave, particularly highest among unmarried women. Respondents without marriage intention more than doubled from 15.8% in the third wave to 37.9% in the seventh wave survey.

We asked respondents who had intention to marry or had never thought of marriage if they had a plan to marry within the next year. While 25.7% answered in the affirmative in the third wave, 8.1% did in the seventh wave, the lowest since the third wave survey. After falling to 10.9% in the fourth wave, the proportion remained at low 10% levels but dropped below 10% in the seventh wave. By contrast, the proportion of respondents with no plan to marry went up from 74.3% in the third wave to 91.9% in the seventh wave survey.

2) Marital Life of Women with Spouses

Regarding marital happiness, there had been no big difference from the third to seventh wave surveys. The score declined from 66.3 in the third wave to 64.2 in the fourth wave. Then it increased to 65.2 in the fifth wave and 66.4 in the sixth wave. In the seventh wave, the score fell 1.9 points to 64.5.

As for changes in women's perceptions of their husbands, there was no significant change between the surveys despite the slight fluctuations. Nonetheless, when the third wave survey was compared to the sixth, the proportions were higher in all statements in the latter than in the former. By statement, the highest proportion of women agreed to the statement "I trust my husband" in all the surveys from the third to seventh wave, accounting for 90.7%, 91.5%, 91.6%, 93.2%, and 92.7%, respectively. On the other hand, the proportion of agreement was lowest to the statement "I have similar opinions with my husband" from the third to seventh wave making up 70.9%, 70.2%, 70.7%, 75.5%, and 72.0%, respectively. To this statement, about 70% of respondents agreed from the third to fifth wave surveys, but the proportion rose to about 75%

in the sixth wave apparently due to the effects of the additional panel. In addition, approximately 77% agreed to the statement “I usually talk a lot with my husband,” specifically from the third to seventh wave accounting for 76.2%, 76.9%, 75.9%, 78.4%, and 77.5%, respectively. To the statement “I am satisfied with marital life (sexual relations) with my husband,” about 80% agreed, specifically from the third to seventh wave, reaching 79.1%, 82.0%, 80.4%, 81.9%, and 80.6%, respectively.

Regarding causes for marital conflict, respondents mostly agreed to the statement “I have never had such conflict in the last month” in all the surveys from the third to sixth wave. The proportion of agreement increased in the fifth wave (77.7%), reaching the highest in the seventh wave (78.3%). The biggest cause for conflict was “financial issues” in all the surveys, but the issue steadily dropped from the third to the seventh wave, making up 12.0%, 7.9%, 7.7%, 7.7%, and 7.5%, respectively. The second biggest cause was “the respondent’s or her husband’s daily habit (drinking, smoking, coming home late, etc.).” This cause decreased from 9.0% in the third wave to 6.5% in the fourth wave, but then increased from the fifth wave (6.6%), reaching 6.7% in the seventh wave. On the other hand, “children’s education issues” continued to decrease from the third wave (4.9%), standing at 3.2% in the seventh wave survey.

As to decision-making in the family, the areas where “I mostly made decisions” included “Getting my job,” “My career transition,” and “Managing living expenses.” In all these areas, the proportion of “I made decisions” was highest from the third to seventh wave and was on the increase. Regarding “Getting my job” and “My career transition,” the proportion of “Couple made a decision together” was the second largest, but them decreased. As for managing living expenses, the proportion of

“I mostly made decisions” fell and that of “the couple together” slightly rose.

The areas where “Husband mostly made decisions” included “Husband’s getting a job” and “Husband’s career transition.” In these two areas, the proportion of “Husband mostly made decisions” was also the highest from the third to seventh wave and on the increase. The proportion of “Couple made a decision together” was the second highest but then on the decrease. These results showed that decisions on issues related to individual women’s economic activity, such as getting a job or career transition, were increasingly made by the individual women rather than by the couple together.

The areas where the couple made a decision together included “children’s education,” “investment and property management,” and “leisure activity in the family.” In these areas, following “the couple made a decision together,” “I mostly made decisions” made up a relatively very high proportion. Decisions on these three issues were mostly made by the female respondents themselves, if not by the couple together.

3) Family Relations

We examined relations with children by dividing them into children in elementary and secondary schools, unmarried adult children, and married adult children. First, we identified the topics of conversation with elementary and secondary school children, concerns about children by topic, and children’s conversation with their fathers. The most frequent topic of usual conversation with elementary and secondary school children was about “children’s school life,” followed by children’s

“academic achievement and entrance to a higher school.” That is, conversation between these children and parents largely centered on school life, school record, and going on to a higher school. Specifically, conversation about “children’s school life” accounted for 68.6% in the third wave, then continually increased to 71.0% in the seventh wave. On the other hand, conversation about “academic achievement and entrance to a higher school” made up 42.8% in the third wave, increased in the fourth and fifth waves, but then decreased from the sixth wave, dropping to 38.8% in the seventh wave. Conversation about “children’s habits in daily life” accounted for a large portion of 46.5% in the third wave, but then continued to fall to 34.1% in the seventh wave.

According to the result of surveying the frequency of conversation between elementary and secondary school children and their fathers, most of them had conversations only a few times or more. When examined by trend, “Had conversation with father only a few times” made up the highest proportion of 48.7% in the third wave, but then “Had conversation frequently” accounted for a high proportion in the fourth and fifth waves, then “Had conversation only a few times” again made up a high proportion in the sixth wave and onwards. The proportion of “Had no conversation” was small, but rose to 1.0% from the third to fourth wave, then up to 1.7% in the seventh wave. This shows that more and more elementary and secondary school children gradually do not have any conversation with their fathers.

Second, we surveyed whether respondents had any conversation with adult children and the top topics of their conversation. First, the top topic of parents’ conversation with their unmarried adult children was about “children’s getting a job or career path” from the third to seventh wave surveys all. The next top topic was about “children’s work life” from

the fourth to seventh wave surveys, excluding the third wave. According to the result of the third wave survey, “child/ren’s opposite-sex friend and marriage plan” made up the highest proportion of the topics, but gradually decreased to a mere 12.1% in the seventh wave. On the other hand, the topic about “children’s work life” increased in the fourth wave and onwards, probably because it was more difficult for children to get a job than ever before due to the economic recession, and accordingly parents took more interest in their children’s prospective work life. As such, children’s getting a job, career path, and work life became more urgent issues than their “opposite-sex friend and marriage plan.” Or, it was because a climate was created in which they did not mention unmarried adult children’s dating or marriage. The proportion of “had almost no conversation” dropped from 8.6% in the third wave to the lowest of 5.4% in the fifth wave, but then slightly rose to 7.0% in the seventh wave. Although the proportion of “Had almost no conversation with adult children” was on the decrease, there was a certain proportion of conversation between them.

Third, we examined whether children gave financial assistance to their parents by dividing the respondents into those who live together or separately. First, when their parents lived with their other sibling, the proportion of those who did not give financial assistance was higher than those who did. When their parents lived alone separately, the proportion of those who gave financial assistance was higher than when their parents lived with other sibling. Also, when their parents lived alone separate, the proportion of giving financial assistance tended to increase from the third to seventh wave, excluding the sixth wave. When their husband’s parents lived with their husband’s other sibling, the proportion of giving financial assistance was higher than that of giving the assistance to their

parents. It was the same with the case where their husband's parents lived alone separately, with a higher proportion of giving financial assistance. On the other hand, the proportion of those who gave the assistance to their parents-in-law who lived alone tended to gradually decrease from the third to seventh. Although the proportion of those who gave the assistance to husband's parents who lived with husband's other sibling tended to slightly rise, it recently decreased in the seventh wave survey.

〈Table 3〉 Whether children gave financial assistance to parents

(Unit: %)

Category			3 rd	4 th	5 th	6 th	7 th
My parents	Live with other sibling	Gave	14.3	16.4	15.7	14.2	15.6
		Did not give	85.7	83.6	84.3	85.8	84.4
	Live alone separately	Gave	19.9	20.6	22.3	18.8	21.6
		Did not give	80.1	79.4	77.7	81.2	78.4
	Total		100.0	100.0	100.0	100.0	100.0
Husband's parents	Live with other sibling	Gave	23.8	25.0	25.2	26.4	22.7
		Did not give	76.2	75.0	74.8	73.6	77.3
	Live alone separately	Gave	33.0	29.8	31.6	27.3	26.0
		Did not give	67.0	70.2	68.4	72.7	74.0
	Total		100.0	100.0	100.0	100.0	100.0

Source: Korean Women's Development Institute (2020). Analyzed the raw data of the Korean Longitudinal Survey of Women and Families (weights given)

4) Values

Among the questions about marriage, the proportion of affirmative answers to the positive statements about marriage that "Marriage is a must" and "It is good to marry young" was higher with the higher in

age. On the other hand, the proportion of positive responses to the statements went down in more recent years. To the statement about values on someone to marry “Should marry someone with similar family backgrounds,” the higher the age, the more they answered in the affirmative, and the lower the age, the proportion of positive responses decreased.

To the rather negative statements about marriage that “My own self-achievement is more important than marriage” and “Marriage will bring restrictions on my own life,” the proportion of agreement went up with the lower in age and in more recent years. When combined with responses to previous questions, positive perceptions of marriage decreased a lot with the younger and in more recent years.

To the statement that “Must divorce when husband has an affair,” the proportion of agreement was higher with the younger and in more recent years. This shows that younger people value trust between the couple and perceive marriage as a breakable institution.

To the positive statements “It is good to have children early in marriage” and “Having child/ren is a must,” the proportion of positive responses dropped with the younger and in more recent years. This gives a glimpse into the low-fertility era. Meanwhile, to the statements about raising children “Can divorce even if I have child/ren” and “Having child/ren is permissible even without getting married,” tended to increase with the younger and in more recent years. This is believed to imply that the family composition is likely to diversify.

To the statement about the attitude toward traditional division of gender roles “It is ideal for men to get a job and for women to make home,” the proportion of agreement was lower with the younger and in

more recent years. To the statement “Wife’s getting a job will have a negative impact on preschool child/ren,” the proportion of agreement was higher with the younger and in more recent years. These results were rather contradicting with each other.

To the statement about women’s getting a job “Wife’s getting a job makes equal relationship with husband,” the proportion of positive responses was relatively even by generation and period. To the statement “A working couple should share housework fairly,” the proportion of agreement decreased with the younger and in more recent years. Because “equal” and “fair” are neutral words and disagreements to the statements may appear in two directions, it is necessary to interpret them with care.

To the statements “Even as a couple, each should manage his/her income” and “A house should be registered in couple’s joint name,” the proportion of agreement went down with the younger and in more recent years. Different positions and living environments between older women who had no economic power in the family in the past and younger women who currently do have economic power may have resulted in different responses to these statements.

To the statement “Parents should prepare college tuition fees for child/ren,” the proportion of agreement was higher with the younger, and the generation gap in their responses narrowed in more recent years. In particular, the proportion of agreement was lowest with the parent generation in their 50s, who may be bearing the main burden of the college tuition fees. To the statement “Parents should prepare marriage funds for child/ren,” the proportion of agreement was higher with the younger, in more recent years, and in all age groups. This indirectly reveals how both the parent and children generations are burdened with marriage funds.

To the statement “Parents should support adult child/ren in financial difficulties,” the proportion of agreement was higher with the younger and in more recent years. From this, we could find that as the economy becomes more difficult, financial bonds between family members can be stronger. On the other hand, to the statement “Child/ren should live with parents when parents get old,” the proportion of agreement was lower with the younger and in more recent years.

2. Women’s Jobs

1) Women’s Economic Activity

The proportion of wage workers in the seventh wave (2018) was 68.4%, 9 percentage points less than 77.4% of the 2018 Economically Active Population Survey by Statistics Korea. This was because the KLoWF included unpaid family workers working shorter than 18 hours a week in the scope of the employed and also the panel was aging.

The commuting time of the employed influenced the work-life balance and quality of life. Their round-trip commute time was 42.0 minutes on average in the seventh wave. By employment status, the round-trip commute time of wage workers was 49.3 minutes in the seventh wave, which was longer than 24.1 minutes of non-wage workers and 45.7 minutes of special-type workers. Since the third wave survey, no big change had occurred in the commuting time of wage workers. Also, the commuting time of non-wage workers and special-type workers increased slightly from the sixth wave to the seventh wave, but not significantly.

When we examined whether workplaces offered major welfare benefits,⁴⁾ a small proportion of business places provided menstrual leave

4) Because the data on welfare benefits for wage workers were collected based on the respondents’

and maternity leave, which were essential for women, childcare leave, and workplace childcare facilities.

Though menstrual leave was legal leave, only 15.8% of wage workers were given such leave in the seventh wave survey. Of the respondents, 76.2% said they were offered menstrual leave and 8.0% said they did not know whether such leave was provided. The proportion of women given menstrual leave dropped by 7.7 percentage points from the third wave (23.5%). Moreover, only 65.8% said that they received the leave in the seventh wave, down 19.5 percentage points from the third wave survey (85.3%).

Maternity leave was also legal leave. Nonetheless, only 23.6% of female wage workers said such leave was provided, 64.4% said it was not given, and 12.0% said they did not know whether it was provided. The proportion of provided maternity leave gradually fell from 29.5% in the third wave. Due to the aging panel, the proportion of women who took maternity leave gradually decreased. In the third wave, 83.1% of respondents said they could take maternity leave, but this proportion considerably fell to 55.7% in the seventh wave.

Regarding childcare leave, 29.8% answered that their workplaces provided it in the seventh wave, up 4.1% from the third wave survey (25.7%). This was distinguished from other welfare benefits that were increasingly less likely to be provided. Like in maternity leave, however, the proportion of childcare leave given to the respondents themselves plunged. It reached 83.4% in the third wave, falling to 52.9% in the seventh wave survey. The main cause for the decline seemed to be the aging panel, which also explained the decrease in maternity leave.

perceptions of the benefits, the outcome of the survey might be slightly different from actual benefits provided by workplaces based on relevant laws and systems.

The proportion of business places providing workplace childcare facilities was very low at 4.7% in the seventh wave. The proportion reached 6.0% in the third wave, but then dropped to 3.1% in the fourth wave, then stood at lower than 5%. Also, the proportion of respondents who benefited from the facilities accounted for 74.4% in the third wave, but significantly decreased to 45.3% in the seventh wave. As stated in the above, this decrease was mainly caused by the aging panel.

Non-wage workers consisted of employers who hired employees, the self-employed without employees, and unpaid family workers working for family businesses. Non-wage workers were surveyed by classifying them largely into employers or the self-employed and non-paid family workers.⁵⁾

We asked employers and the self-employed about difficulties running businesses. They mostly said “Sales or profits were too low” in the seventh wave survey. To this statement, 66.7% “strongly agreed” or “moderately agreed.” The proportion of respondents who pointed out low sales or profits as difficulty stood at 66.1% in the third wave, remaining at a similar level after that with slight fluctuations. As the second biggest difficulty, they agreed to the statement “Rent and labor costs are too high” (47.2%), followed by “Working hours are too long” (44.4%), “the future of work is not bright” (42.6%), “The work is not rewarding” (36.8%), and “Doing housework and work simultaneously is hard” (34.6%). On the other hand, the proportion of “Rent and labor costs are too high” gradually rose from 31.4% in the third wave to 47.2% in the seventh wave, showing that this was one of the major difficulties of their management. By contrast, the proportion of “Working hours are too

5) The KLoWF includes women working shorter than 18 hours a week in the scope of the employed. This is different from other statistics that classify them as the economically inactive population.

long,” “The future of work is not bright,” “The work is not rewarding,” and “Doing housework and work simultaneously is hard” tended to decline after the third wave survey.

The proportion of employers and the self-employed who agreed (“strongly agreed” plus “moderately agreed”) to the statements “Have difficulty managing employees, etc.” and “Financing business is not easy” stood at 25.9% and 25.1%, respectively, in the seventh wave, showing they had relatively less difficulty in these issues. However, the difficulty of managing employees, etc. gradually increased after the fourth wave, while that of financing business decreased after the third wave survey.

2) Work Environment

The KLoWF conducted a job satisfaction survey of respondents who had a job. For those with several jobs, their main jobs were surveyed. The level of job satisfaction was similar by item and the proportion of respondents satisfied with their jobs was rising by item over time. Respondents were mostly satisfied with the job content (the content of the work they were doing), work environment, working hours, and interpersonal relationships (communication, etc.) in the workplace. However, the proportion of respondents satisfied with income levels and welfare benefits was relatively low. In the seventh wave survey, respondents were most satisfied with the job content (51.1%), followed by working hours (48.7%) and work environment (47.6%). When we examined satisfaction with the job content by employment status, non-wage workers, including the self-employed but excluding unpaid family workers, were most satisfied (57.6%), followed by special-type

workers (52.2%) and wage workers (52.1%). Regarding satisfaction with working hours, special-type workers were most satisfied at 54.3%, followed by wage workers at 52.9%, and non-wage workers, excluding unpaid family workers, at 44.7%. As to satisfaction with income levels, wage workers were most satisfied at 28.5%, followed by special-type workers at 25.6% and non-wage workers, excluding unpaid family workers, at 21.6%.

We also examined impacts of work-life balance on work and family life, using a questionnaire. We examined first how women's work influenced their life and family life. According to the results, the proportion of respondents who agreed to the statement "Working gives rewarding experience and vitality in my life" increased from 87.7% in the first wave to 92.2% in the seventh wave. The proportion of women who agreed to the statement "I can get recognition from the family by working" stood at 82.8% in the first wave and 85.1% in the seventh wave. Women who agreed to the statement "My family life is more satisfying when I work" increased from 80.3% in the first wave to 85.7% in the seventh wave. Conversely, the proportion of women who agreed to the statement "My work has a positive impact on children" was relatively low, with 65.1% in the third wave and 57.9% in the seventh wave. Also, we examined the proportion of agreement to the statement "My family life is more satisfying when I work" by age group in the seventh wave survey. It was highest among women in their teens (89.6%), followed by those in their 40s (88.6%) and 30s (86.6%). The proportion was lowest among women in their 70s (78.1%) and 20s (80.9%).

We then identified how much family life affected work life. The proportion of women who agreed to the statement "I work harder because

family members give recognition to my work” was high at 69.6% in the first wave and 74.6% in the seventh wave, but then slightly decreased from the fifth wave. The proportion of agreement to the statement “I work harder because of responsibility for supporting family” stood at 61.0 % in the first wave and 54.7% in the seventh wave, steadily declining from the fourth wave. The proportion of women who said it was often difficult to do work due to the burden of childcare or heavy housework gradually dropped but without significant fluctuations. By age group, the proportion of agreement to the statement “I work harder because family members give recognition to my work” was highest among women in their 40s at 80.5%, followed by those in their 30s at 79.4% and 50s at 75.6% in the seventh wave. To the statement “It was often difficult to balance work and family due to the burden of childcare,” women in their 30s (40.1%) and 40s (41.1%) very much agreed.

The KLoWF surveyed employers or wage workers about whether there was gender discrimination as an organizational culture in the workplace. The proportion of respondents who said yes to the items related to gender discrimination gradually declined over time, but then slightly rose from the sixth wave. When changes over time were examined, the proportion of respondents who said that tasks were fixed or customarily divided according to gender in the workplace was the highest in all the first to seventh wave survey. On the other hand, discrimination regarding training opportunities in the workplace made up the lowest proportion.

We surveyed the unemployed who were seeking jobs about the desired type of work. According to the results of the survey, 97.9% of the respondents hoped to get a job in the seventh wave survey. Also, the proportion of those who wanted to be wage workers or get a job was

on the rise, except for the second and sixth wave surveys. In the third and sixth wave surveys, many respondents wanted to start a business. In the third wave, the proportion of respondents who hoped to start a business was high among those in their 50s and 30s than in the other age groups. In the sixth wave, those in their 40s and 20s wanted to start a business more than the other age groups.

When asked about desired working hours, respondents who chose a job as desired type of work mostly wanted a full-time job in all the surveys, except for the fourth and seventh wave surveys. By age group, those in their teens and 20s mostly wanted to work full-time at 100.0% and 94.8%, respectively, in the seventh wave, followed by those in their 50s at 84.5%, 30s at 72.3% and 40s at 59.5%. Among respondents in their 60s and 70s, the proportion of those who wanted to work part-time was higher than those who wanted a full-time job. The proportion of those who wanted a part-time job stood at 40.5% in the first wave and then fluctuated, falling to some 23.8% in the seventh wave. As the main reason for wishing to work part-time, respondents in their 20s mostly answered “studying,” while those in their 30s and 40s “childcare.” Those in their 50s answered “other” reasons and those in their 60s and 70s “health issues” as the main reason.

3. Implications of the Rudimentary Analysis

The results of the rudimentary analysis of the KLoWF present the following policy implications:

First, a solution to low fertility rates should start with improving the culture related to gender equality in the family. When unmarried women were asked about marriage intention, 31.4% had such intention in the

seventh wave, about a mere half the proportion of 62.0% in the third wave. The proportion reached the highest in the fourth wave, but then steadily decreased to 59.8% in the fifth wave and 42.0% in the sixth wave. Regarding the perceptions of gender roles in the family, 44.8% of respondents agreed to the statement “It is ideal for men to get a job and for women to make home” in the third wave, and 43.6% in the seventh wave. This attitude toward gender roles are highly likely to influence negative thoughts about marriage and lead to low fertility rates. Hence, to solve the issue of low fertility rates, it is necessary to review various policies to create a gender equal culture in the family.

Second, women’s employment policy should be formulated based on job security and women’s demands. A vast majority of female job seekers surveyed, or 97.9%, wanted to be wage workers in the seventh wave. Of them, 76.2% hoped to work full-time and 23.8% part-time. The proportion of women wishing to work part-time sharply dropped in the fifth wave, then tended to gradually increase from then on. As the main reason for hoping to work part-time, women in their 20s answered “studying,” those in their 30s and 40s “childcare,” and those in their 60s and 70s “health issues.” Though a lot of women wanted to work full-time, they at times voluntarily chose to work part-time. The proportion of women working part-time was relatively high among those in their 40s and 60s or older. Therefore, in establishing women’s employment policy, it is necessary to consider the demand of each age group while ensuring job security.

Third, it is necessary to develop both educational programs for supporting women’s employment and business partnership programs. Of the female respondents, 77.7% said that the biggest difficulty (multiple responses, based on the seventh wave) in seeking a job was the lack

of jobs, followed by the lack of career experience at 28.2%. In other words, 3 out of 10 unemployed women answered that they had difficulty seeking a job due to the lack of work experience. Moreover, in the seventh wave survey, a mere 3.8% of women received education and training for self-development, employment or vocational competency development in addition to regular education in the preceding year. This is a significant decline compared to 8.3% in the first wave survey. Of the respondents, 52.0% said the purpose of education and training was to improve their job competencies, followed by employment or reemployment at 24.0%. In other words, 2 to 3 out of 10 women received education and training to get employed or reemployed, but 28.2% of unemployed women had difficulty getting a job due to their lack of career experience. Since the foreign exchange crisis of 1997, businesses have hired mainly experienced workers rather than the inexperienced. Nonetheless, the proportion of women with education and training experience was very low at 3.8%, negatively affecting female job seekers. As such, the government needs to actively provide the jobless with education and training as well as programs for diverse work experiences.

III. In-Depth Analysis and Policy Implications

1. Analysis of Determinants of the Time Allocation of Working Women with Spouses

The purpose of this study is to analyze the determinants of the time allocation of working women with spouses. As for women in dual-income families, the study analyzed what determined the

distribution of housework time and market labor time and how different women's time allocation was from their husbands.' The study also analyzed the factors influencing the distribution of housework and market labor hours of women in single-income families to explain the factors influencing the time allocation of working women with spouses.

In this study, we used the data from the fourth to seventh wave KLoWF and analyzed only working women with spouses among married women.

For dependent variables, we used housework hours and market labor hours, and for independent variables, economic characteristics of households, whether to have children, whether to live together with parents, demographic characteristics, employment characteristics, values and health conditions.

We analyzed the allocation of housework time and market labor time by distinguishing women in dual-income households from those in single-income households. For a model, we used the seemingly unrelated regression (SUR) model for the panel considering the connection between the two forms of time.

According to the results of the analysis, there were differences between women in dual-income families and in single-income families regarding the determinants of the time allocation. Among women in dual-income households, the time allocation was significantly influenced by such factors as living together with the respondent's or her husband's parents, educational levels, employment status, the respondent's and her husband's income, and attitude toward gender roles like "Wife's getting a job makes the relationship with husband equal." Such factors as having preschool children, age and health conditions lengthened both housework

hours and market labor hours, rather than distributing the two types of hours. In other words, when women in dual-income households lived together with their or their husband's parents, when they had a high level of education, high income and high awareness of gender equality, and when they were wage workers, housework hours decreased while market labor hours increased.

On the other hand, in the case of men in dual-income households, major factors influencing their time allocation included having elementary or secondary school children, age, education levels, and income. Such factors as total living expenses, having preschool children, and wife's income lengthened both the housework and market labor hours instead of distributing them. However, when husbands lived together with their parents and when they were wage workers, both the housework and market labor hours shortened, unlike the case of their wives.

In the case of women in single-income households, no factor significantly affected the allocation of housework and market labor time. In other words, some factors had an impact on housework hours and other factors on market labor hours, but no factor influenced both.

The results of this study have the following policy implications:

First, factors influencing the allocation of housework and market labor hours among the couples in dual-income households included education and income levels. This means that women in dual-income households allocate their time based on the relative resources. Women with higher education and lower income tend to reduce market labor time and lengthen housework time. This finding is consistent with the result of a previous study that because married women with higher education have

a high expectation of childcare and children's education, their labor supply decreases if the opportunity costs of housework hours rises. This implies the necessity for establishing a policy to supply high-quality childcare and domestic services at low prices in order to prevent highly educated women from leaving the labor market.

Second, the factor most significantly influencing the time allocation of women in dual-income families was "living together with parents." In other words, working women with spouses adjust market labor hours by distributing domestic chores to external factors, like parents, rather than dividing housework and childcare hours with their husbands. This reflects a reality in which there still remains a gender stereotype of wives having to do housework. This implies the necessity for developing a policy to make active use of men in the current work-family reconciliation policies concentrated on women.

2. Exploratory Study on Differences in Relationship according to the Relative Income of Couples: Focusing on Decision-Making, Sharing Housework and Emotional Support

This study aims to clarify the effects of relative income of couples on their marital relationships. As for marital relationships, we considered the couples' decision-making, sharing housework, support from spouses for women's economic activity, family-work spillover and recognition of roles in the family. Then we examined what differences occurred in each of these areas according to the income gap. To this end, we reviewed married women in dual-income families in their 30s to 40s surveyed in the third and seventh wave KLoWF. By dividing them into the group of women whose income was the same as or higher than their husbands'

(Group I) and the group of women whose income was lower than their husbands' (Group II), we examined how differences between groups regarding their marital relationships and the areas changed from the third to seventh wave survey.

Major results are as follows: First, regarding decision-making, those who led decision-making varied depending on the income gap. It is noteworthy that couples are more likely to make decisions together in Group I. This phenomenon weakened in the seventh wave as the respondents increasingly led the decision-making on all family agendas, regardless of the wife's income levels. In the other areas as well, situations were more positive in Group I than in Group II. Also, things became better in both groups in most areas in the seventh wave compared to the third wave survey.

Based on these results, we present the following policy implications: First, although the other variables gradually improved over time from the third to seventh wave, support from spouses for women's work was strengthened in Group I only. This means that working women could not acquire the same status of breadwinners in the family as their spouses. After all, a proper evaluation of women's economic activity and spouses' recognition of women's work should start from efforts not only to raise individuals' awareness of gender roles but also to improve the labor market where low wage and non-regular employment are concentrated on women.

Second, the fact that women still mostly do domestic work implies the necessity for policy intervention to encourage men to participate in housework. To promote men's participation in housework, it is necessary not only to improve the awareness of the division of gender roles but also to secure the resource of time for men to do housework.

Finally, there is an issue about whether the mechanism of behavior modification caused by gender compensation or cognitive dissonance has really been weakened in the formation of marital relationships. Women took the initiative in decision-making more in the seventh wave than in the third wave survey. Nevertheless, wives were still the main agents of housework regardless of their wages, and they were not free from the burden of taking care of children in the seventh wave. This problem can be resolved when individual women's identities as workers and the perception of childrearing as the couple's joint responsibility is strengthened. To this end, the government should reinforce adult education to raise the awareness of gender equality, and more fundamentally, perform an active role in spreading a consensus on the equal distribution of work and childcare between men and women throughout Korean society.

