

Gender Equity and Fertility Intentions in “Lowest-Low”
Fertility Settings: The Case of South Korea

Mary C. Brinton and Eunsil Oh
Harvard University

Introduction

The emergence of very low fertility in Europe and East Asia has generated a large body of research over the past few decades. A leading theory for explaining low fertility is McDonald’s gender equity framework (2000a, 2000b; 2013). McDonald posits that increases in women’s education and labor force experience have led to greater gender equity in the public sphere, a situation that is not necessarily mirrored in the sphere of the family. While married women’s labor force opportunities have increased, in many societies there has not been a parallel decline in the share of housework and childcare done by women. McDonald hypothesizes that until greater gender equity in the household sphere is achieved, fertility levels may remain low because women are essentially performing a “double shift” of market work and household and childcare work.

Gender equity theory has gained considerable ground as demographers have compared fertility trends in Northern Europe and North America, where the male breadwinner model is increasingly giving way to a “dual-earner/dual-carer” model, to fertility trends in Southern European and East Asian societies where the male breadwinner ideology and a highly gendered household division of labor prevails. A number of scholars have explored how the gender equity level of a society is linked to the trajectory of the total fertility rate. These studies have used aggregate-level data (Arpino et al. 2015; Brinton and Lee 2014; Mills 2010; Myrskylä et al. 2009) or theoretically-driven modelling strategies (Esping-Andersen and Billari 2012). Other scholars have focused on the implications of McDonald’s gender equity framework for micro-level outcomes, linking indicators of gender equity in the household to intended or completed fertility (Cooke 2008; Kaufman 2000; Mills et al. 2008; Puur et al. 2008; Torr and Short 2004).

While the gender equity framework has had considerable theoretical appeal to scholars interested in the transition to “lowest-low” fertility across many postindustrial societies, empirically testing the predictions of the framework has been difficult. This is due in large part

to the fact that the theory's conceptual formulation is straightforwardly at the macro-level whereas the empirical implications of the theory lie at the micro-level of behavioral intentions and action, which are then aggregated up to produce the societal fertility level.

This paper seeks to contribute both theoretically and empirically to research on gender equity and fertility. First, we point out the confusion across levels of analysis in tests of McDonald's theory, and aim to clarify the predicted relationship between relative gender equity in the public and private spheres (the macro-level) and fertility intentions (the micro-level).

Second, we leverage our knowledge of a specific "lowest-low" fertility society, South Korea, to test and refine McDonald's theoretical framework. In doing so, we go beyond quantitative studies that of necessity are constrained by available survey data. Many empirical studies have measured gender equity in the public sphere by macro-level indicators such as women's educational attainment and labor force participation, and have measured gender equity in the private sphere at the household level (e.g. the household division of labor and husbands' and wives' gender-role attitudes). We respond to McDonald's suggestion that measuring gender equity "will require sophisticated anthropological knowledge of the society" (2000: 429-430) and utilize data from a five-country comparative project designed specifically for the purpose of examining the relationship between gender equity and fertility. Analysis of nearly 100 structured in-depth interviews of young men and women at the family formation stage in South Korea generates a richer understanding of how the level of gender equity in the public sphere—a macro-level construct—is reflected in the *lived experience* of individuals, especially working mothers. We argue that the latter is key to testing McDonald's framework. In particular, we disentangle gender equity in education from gender equity in the labor market, viewing education and the labor market as separable institutional settings rather than as a unified representation of the public sphere.

In the first section we review macro- and micro-level empirical studies that have attempted to test McDonald's theoretical framework. We summarize several issues that have proven problematic and outline how we will address them in our empirical analysis. In section two we describe the case of South Korea and explain why it is an ideal case for testing gender equity theory. Section three describes our original data from the South Korean context, and section four presents our analysis. Section four concludes with implications for future studies of comparative fertility.

Gender Equity and the Transition to Low Fertility

McDonald's theory posits that a major cause of the transition to very low fertility in many postindustrial societies lies in the contradiction between women's increased opportunities and equity with men in the public sphere and continued gender inequity in the private sphere of the family. This contradiction creates a time bind for mothers, making it difficult for them to meet the demands of labor market participation while doing the major share of housework and childcare. In attributing very low fertility to the mismatch in gender equity in the public and private spheres, McDonald's theory deviates from second demographic transition theory in assuming that low fertility is driven not so much by a decreased desire to have children as by the structural contradictions in women's role and the slower pace of change towards gender equity in the private than in the public sphere. As McDonald states, "In expressing higher 'ideal preferences' on average, women are effectively commenting upon the nature of the social-institutional settings in which they consider having children. They are saying that, in a different institutional setting, they believe they would have had more children" (2006: 485).

Consistent with McDonald's framework, research consistently suggests that even in postindustrial societies the majority of individuals claim to *want* more children than completed fertility levels would suggest (Bongaarts 2001; Hagewen and Morgan 2005; Rossier and Bernardi 2009). Indeed, the two-child ideal has shown remarkable resilience across European societies, including those with low completed fertility (Sobotka and Beaujouan 2014). An enduring puzzle in research on lowest-low fertility is the extent to which people are expressing their true fertility ideals in responding to survey questions or whether their answers are simply reflecting dominant social norms about the undesirability of having one child or remaining childless. An extensive demographic literature deals with the correspondence between fertility ideals, intentions, and completed fertility. While we do not have space to review that literature here, the empirical portion of our paper explains our operationalization of these concepts for the purpose of testing McDonald's proposition that in lowest-low fertility contexts, a central problem is that ideals are not fulfilled due to women's role conflicts stemming from gender inequity.

Macro-Level Studies. Beginning with its original formulation, McDonald's theory has been a macro-level, institutional argument about the relationship between gender equity in "individual-oriented social institutions" and "family-oriented institutions." McDonald's

emphasis on macro-level gender equity is consistent with Mason's oft-cited focus on the "gender system" (Mason 1997). The theory is oriented towards explaining sustained fertility decline to lowest-low levels in some societies vis-à-vis others.

But operationalization and testing at the macro-level is inherently difficult, as it ideally requires data from a large enough number of low-fertility societies to test the implications of institutional-level gender equity/inequity in the public and private spheres for total fertility or another aggregate outcome such as completed cohort fertility. Responding to the paucity of studies explicitly linking societal levels of gender inequality to fertility decisions and outcomes, Mills (2010) examined the relationship between six alternative aggregate measures of gender equality and individual fertility intentions as well as progression to a birth in 24 European countries. None of the gender equality indices was significantly related to individual-level fertility outcomes, and only one measure (GDI, or the Gender-related Development Index) was positively and significantly related to fertility intentions. This led Mills to argue for closer attention to what aggregate-level attitudinal indicators are actually measuring, as these measures vary in the degree to which they capture McDonald's conceptualization of gender equity. In this regard, a widely-cited recent article (Myrskylä et al. 2013) suggested that societies experiencing a fertility recovery from lowest-low levels in the past several years are those where progress towards gender equality has continued apace. The research related countries' total fertility rates to the Gender Development Index (GDI), an index based on the Human Development Index and measuring health and education adjusted for gender differentials. As Mills (2010) and others (Jütting et al. 2008) have pointed out, the GDI is arguably better considered as a summary measure of national economic prosperity and human development rather than gender equality.

In other macro-level studies, Arpino et al. (2015) test the relationship between an attitudinal measure of gender equity at the aggregate level and the total fertility rate and generate results consistent with McDonald's theory that as countries begin moving away from the male-breadwinner model fertility generally falls, then experiences a rebound as attitudes reflecting greater gender equity diffuse across society. Brinton and Lee (2014) utilize aggregate-level measures of gender-role attitudes and labor market institutions supporting a male-breadwinner model to predict variation in total fertility rates across 26 OECD countries over a 27-year period. They find support for the idea that at the aggregate level, societal gender-role norms and labor

market institutions supporting the male breadwinner model are negatively associated with fertility.

Other studies have adopted a modeling approach rather than using comparable empirical data across countries. Esping-Andersen and Billari (2015) posit different family equilibria at various stages of fertility transition that reflect McDonald's reasoning. Consistent with McDonald, they suggest that the endpoint of fertility transition is a moderate-fertility regime characterized by gender egalitarianism. Fent et al. (2015)

Micro-Level Studies. Another approach to testing McDonald's theory has been to examine the relationship between gender equity and fertility intentions or outcomes in one or a small number of countries. In one of the first attempts to empirically test McDonald's framework at the micro-level, Torr and Short (2004) argued that a logical extension of the inherently macro-level theory is that in the context of a relatively high level of gender equity in individual-oriented institutions in the U.S., couples with a more equitable household division of labor will be more likely than other couples to transition to a second birth. Their reasoning is based on the implications of McDonald's theory for the compatibility of employment and childrearing for women. They found that among dual-earner couples, those with a highly gender-skewed household division of labor (in the top 25% or bottom 25% of the distribution of wife's share of housework) were more likely to proceed to a second birth than couples with a moderately equitable household division of labor. Wife's egalitarian ideology (a composite measure of two attitude variables) had no relationship to the transition to a second birth.

Puur et al. (2008) took a different but consistent approach, positing that men with egalitarian gender-role attitudes are likely to have higher fertility intentions than men with more traditional role expectations. Testing this supposition in eight European societies, they found the predicted relationship in five of the countries. Kaufman (2000) also found that men with egalitarian gender-role attitudes were more likely than men with traditional attitudes to intend to have a child, although this did not hold for women. Oláh (2003) examined the effect on transition to second birth of macro-level state policies supportive of dual-earner couples in two societies, Sweden and Hungary, with different levels of gender equity in the private sphere.

A number of other micro-level studies have used the household division of labor to measure gender equity in the private sphere to predict either fertility intentions or transition to a second birth. Similar to Torr and Short, these studies have generally predicted that men's

contribution to housework will lead to a higher probability of transition to second birth, especially when mothers are employed and therefore likely face severe time constraints. In their study of Italy and the Netherlands, Mills et al. (2008) found that women's share of housework is negatively correlated with their fertility intentions if they are working more than 30 hours a week and/or already have at least one child. This led them to conclude that gender equity in the household matters because it lessens the time conflict experienced by working mothers. Cooke (2008) compared two countries with male-breadwinner ideologies and institutions (Italy and Spain) but slightly different levels of gender equity in the labor market to see if the latter difference affects the relationship between gender equity in the private sphere and the transition to second child. She found that wife's weekly work hours are negatively correlated with transition to second birth in both countries. An increase in husbands' share of childcare from none to between one-quarter to one-third of the couples' childcare time is positively related to the transition to a second birth in Italy, especially when mothers are employed. Further increases in fathers' share of childcare time, however, are *negatively* related to transition to second birth. Cooke concludes, "When Italian couples venture too far from traditional domestic roles, however, the likelihood of second birth declines sharply." She continues, "Whether this reflects 'maternal gatekeeping' on the part of Italian mothers or Italian fathers' resistance to assuming more of the care tasks cannot be assessed with these data" (2008: 137).

Taken together, the findings from micro-level tests of McDonald's theoretical framework offer some support for the positive effect of gender equity in the private sphere on fertility intentions and outcomes. Differences in the measures used for both the independent and dependent variables render this conclusion tentative, however. On the independent variable side, studies have measured gender equity in the private sphere by the division of labor in housework or childcare or by gender-role attitudes of husbands and/or wives; the dependent variable is generally either intention to have a birth or the transition to second birth. And beyond these differences in measurement lie two deeper issues: The measurement of gender equity in the public sphere, and the absence of a clear set of predictions specifying how the *consistency* or *inconsistency* between the macro-level context and individuals' household gender equity affects fertility intentions.

Just as the type of rich contextual knowledge of gender equity in the public sphere proposed by McDonald has been replaced in large-N comparative studies by summary indicators

of macro-level gender equity, micro-level studies of one country or several countries have relied on an implicit characterization of a given country as gender equitable or inequitable. By doing so, researchers in effect “control for” the public sphere as if all individuals in a given country experience an equivalent level of gender equity in the public sphere, an assumption that is unlikely to hold. Some researchers (Cooke 2008; Mills et al. 2008) attempt to measure public gender equity at the micro-level by measuring mothers’ work hours, but such measures are likely to be less indicative of equity than of a time squeeze. Women’s employment per se is clearly an inadequate measure of labor market equity.

In addition to inadequate attention to measurement of gender equity at the macro level, a second issue plagues existing micro-level empirical studies of gender equity and fertility: it is unclear how the macro- and micro-levels of analysis intersect with each other. Here, the lack of specification is evident not just in empirical studies but in McDonald’s original formulation, which does not clearly theorize the translation of the macro-level context into individual-level experience and intentions. Namely, how important for individual fertility outcomes is the correspondence between individuals’ gender-role attitudes and behaviors with gender equity at the macro level? For example, are individuals who hold male-breadwinner beliefs but live in a more gender-equitable ideological and institutional societal context likely to have higher or lower fertility intentions than more gender-egalitarian individuals? Here, Cooke’s (2008) reference to lowered fertility among Italian couples who “venture too far from traditional domestic roles” comes perhaps the closest to inviting consideration of the “fit” between the macro-level context and individual behaviors, suggesting that couples’ deviation from traditional male-breadwinner gender-role norms may result in lower fertility in the Italian setting.

Finally, empirical studies have paid scant attention to distinguishing between gender equity and gender equality. This is a distinction that McDonald has emphasized in his most recent work, where he states that gender equity is a subtle concept meant to signify “perceptions of fairness and opportunity” (2013: 983). He notes that in contrast, “Gender equality is a straightforward concept. It can be measured simply by comparing outcomes for men and women in areas such as education, employment, wages, participation, health, and so on” (2013: 982). McDonald views gender equity as the response of couples, especially women, to the institutional context. In this view, the lived experience of individuals in the context of societal institutions and norms is what matters for fertility.

Our paper addresses these issues through analyzing men's and women's attitudes toward and experiences in the public and private spheres in South Korea, a society characterized by lowest-low fertility. Our data derive from structured in-depth interviews of nearly 100 individuals in the family formation stage. We use the rich qualitative material from these interviews to reconceptualize gender equity in the public sphere in particular, focusing not on summary measures of the public sphere but instead, operationalizing how individuals *experience* gender equity in the public sphere. In addition, we focus on how the correspondence or disjuncture between the experience of gender equity in the public and private spheres influences fertility intentions.

Before introducing our data and operationalization of public- and private-sphere gender equity, we discuss the appropriateness of South Korea as a case.

South Korea: A Lowest-Low Fertility Context

There are several reasons why Korea is an ideal case in which to theoretically and empirically address the relationship between gender equity and fertility intentions. First, Korea has experienced a dramatic educational expansion over the past 40 years that has included women as well as men. Whereas just 8 percent of Korean women age 25-34 thirty years ago had completed education beyond high school, this rose to nearly 70 percent by 2014 (Figure 1). Together with Korean men, Korean women's higher education completion rate is now higher than Japan, the U.S., the average for the OECD and, in fact, any other country in the world. On the face of it, this suggests a high level of gender equity in the public sphere. Moreover, very high educational opportunities are coupled with a wage gap between childless male and female full-time workers age 25-44 in Korea of just over 10 percent, deviating little from a range of other countries including several in Scandinavia.

----- Figure 1 -----

Nevertheless, gender equity in the labor market is much less tenuous, especially with respect to the effect of long work hours and informal norms on the labor force participation of mothers. Korea boasts the longest average weekly work hours for prime-age males of any postindustrial country (OECD 2014b), is notable for long commuting times especially in its major cities, and has a common practice of after-hours socializing among coworkers (Brinton et al. 1995). The overall rate of Korean female labor force participation is relatively low (Figure 2)

by international standards, due in part because of the persistence of an M-shaped curve over the life cycle (Figure 3). Many mothers of young children withdraw from paid work, and some proportion of them re-enter the labor force at a later point in their life cycle. In 2014, 73 percent of Korean women age 25-29 were employed, dropping to 58 percent for women in their 30s (compared to 69 percent in the U.S.). In particular, women with university education face significant under-employment in the contemporary Korean economy, as is the case in other East Asian societies (Brinton 2001); the employment rate for Korean women age 35-44 with at least a college education is 59 percent, compared to the OECD average of 83 percent. Fewer than 11 percent of all managers in Korea are female (Statistics Korea 2014). Figures from the OECD on the motherhood wage gap in a range of countries indicate that women in Korea and Japan experience the largest penalty for having children (Figure 4), despite the relatively high wage equality between childless men and women.

----- Figures 2-4 -----

In sum, the combination of high female educational attainment levels, a low gender wage gap among childless workers, and a persistent M-shaped curve of female labor force participation and large motherhood wage penalty make Korea a highly relevant case for problematizing how gender equity in the public sphere should be conceptualized and measured.

Second, the Korean fertility rate fell dramatically and nearly continuously from the early 1970s on (Figure 5), making it a prime example of a “lowest-low” fertility society that has not entered a “U-turn” rebound phase in its fertility level (Anderson and Kohler 2013; Choe and Retherford 2009). Starting at around 4.5 in the early 1970s, the total fertility rate dropped below replacement level by the mid-1980s and fell to just 1.19 in 2014. As Figure 6 shows, both mean age at marriage and mean age at first birth have risen in a linear fashion over the past 20 years.

----- Figures 5-6 -----

Third, despite women’s greatly improved status in education and in premarital labor force participation and wages, gender equity in the private sphere has greatly lagged behind. A recent survey found that 47 percent of Korean women not participating in the labor market reported having quit due to marriage. An additional 20 percent reported quitting at the time of pregnancy or childbirth and another 29 percent cited childcare responsibilities as the reason for quitting (Statistics on Dual-Earner Households and Women's Career Breaks, 2011). The division of

household labor is highly gendered, with Korean men's low participation in housework rivaled only by that of Japanese men (Tsuya and Bumpass 2004; Tsuya et al. 2012).

Similar to studies of gender equity and fertility in Europe and the U.S., some studies in Korea have examined the association between gender equity within the family and the transition to second birth (Joung and Choi 2013; Park 2008). As in Western studies, gender equity in the household has often been measured as husband's contribution to housework. Park (2008) finds gender equity in the private sphere to be related to progression to second birth only among married women who are employed. For these women, a higher gender equity level in the household (measured as husband's time spent on housework) is positively related to intention to have a second child. This relationship does not hold for non-working mothers of one child. Similarly, studies that do not control for mothers' employment status find that married women are more likely to intend to have a second child when they are more satisfied with married life and with their husbands' participation in housework (Joung and Choi 2013). However, stay-at-home mothers are more likely than working mothers to have a second child, as are women with more traditional gender-role values (Joung and Choi 2013). These studies, perhaps more so than studies done in the West, raise the issue of how women's experience of the public sphere influences their specialization in the household and subsequent progression to higher-order births.

Reconsidering Gender Equity Theory in the Korean Context. Korea's high level of gender equity in the educational sphere and low gender equity level in the labor market pose the question of how to measure overall gender equity level in the public sphere. Furthermore, this highlights the problem of interchangeably using the terms gender equity and gender equality, as noted earlier in the paper. Related to the ambiguity of measuring gender equity level in the public sphere, it is a challenge to measure gender equity in the private sphere as a separate construct. If Korean married women withdraw from the labor market due to workplace discrimination and the demands of childcare, interpreting the household division of labor as an independent construct becomes problematic. A highly gendered household division of labor certainly reflects low gender equity in the private sphere, but the driving force *behind* the inequitable division of housework and childcare may be gender inequity in the public sphere. In that case, the gendered division of paid and unpaid labor within a couple reflects at least in part the intersection or spillover *from* the public to the private sphere, rather than a static numerical ratio that is conceptually distinct from the public sphere.

These considerations lead us to posit a modification of the predictions of McDonald's gender equity theory. As Table 1 shows, gender equity theory would predict that in situations of high gender equity in the public sphere and low gender equity in the private sphere, fertility will fall to very low levels. Conditions of high gender equity in both the public and private spheres should lead to moderate fertility. The correspondence of low gender equity in both public and private spheres should be the "ideal type" of societies that have not experienced the transition from high to low fertility. Finally, the confluence of low gender equity in the public sphere and high gender equity in the private sphere (the upper right-hand cell in the table) is not one that would be predicted by gender equity theory.

Korea is a context that demonstrates high gender equity in educational opportunities and fairly high gender equity in the entry-level labor market for young unmarried adults. Women's educational attainment levels are high. However, labor market institutions operate in accordance with a male breadwinner model, with long work hours and penalties for working mothers. In this contradictory public context, we predict that couples with conservative gender-role attitudes and a highly gendered household division of labor will be more likely to proceed to a second birth than those with egalitarian attitudes. That is, in a context where most women face severe difficulties in balancing work and home responsibilities once they become mothers, many will choose to specialize in the home even if their initial levels of human capital facilitated their entry into relatively high-status jobs as single women. Once the transition out of the labor market has been made, women's focus on home production may well lead to their proceeding to a second birth. In such a setting characterized by labor market institutions that favor male breadwinners, husbands and wives who are essentially "social pioneers" in the sense of holding more egalitarian gender-role attitudes will face greater difficulties in proceeding to a second birth because their beliefs and efforts towards a more egalitarian division of labor contradict dominant social norms and the male-oriented organization of working life. This can reinforce the normative approval of mothers who leave employment and devote themselves to full-time housework and childrearing, hence rendering second births more likely for those couples than for more egalitarian couples.

Our hypotheses thus complicate the predicted relationship between gender equity and fertility by taking into account the interaction between *individual- and couple-level beliefs and experiences* and *labor market institutions that favor male breadwinners over working mothers*.

Because neither individual women nor men can change the institutions of the labor market, even if there is some degree of gender equity at home it is unlikely that this will lead to moderate fertility levels.

Our theoretical framing thus originates with McDonald's theory of gender equity and fertility but is informed by our knowledge of the Korean case and by rich qualitative data generated from the Korean interviews from our five-country comparative project. We now turn to a description of those data. Our operationalizations of gender equity in the public and private spheres derive both from gender equity theory and from emergent patterns in the data. In the empirical analysis, we examine the relationship between these operationalizations and individuals' fertility intentions, testing our proposed modification of McDonald's theory.

Data and Research Design

Sample. Data for the paper come from the "Comparative Fertility and Gender Equity Project" organized by the senior author in 2011-13. The project involved the parallel collection of structured in-depth interviews with over 80 young urban adults in each of five countries. These include two moderate-fertility countries (Sweden and the U.S.) and three low-fertility countries (Japan, Spain, and South Korea). The Korean sample is comprised of 98 men and women age 24-35 in the country's two largest cities, Seoul and Busan, where half of the nation's population resides. We stratified the sample by sex and family formation stage, with 1/3 of the female and male samples consisting of single (unmarried, non-cohabiting) individuals, 1/3 consisting of married individuals with no children, and 1/3 consisting of married individuals with one child. In order to minimize the social class heterogeneity of our sample, we included only individuals who had completed some form of education beyond high school. We sampled in such a way as to reflect the population percentages in the relevant age group of two-year college, four-year college, and advanced degree graduates. Snowball sampling was used to generate the sample, starting with three main "seeds" or referrers and proceeding outward, with each successive "seed" allowed to introduce a maximum of up to three new individuals.

A disadvantage of the snowball sampling method is the potential existence of clusters within the final sample, resulting from the small number of initial seeds and limited network dispersion in the referral chains. Some measures can be taken in the sampling design to alleviate this concern. For example, we endeavored to have a large number of initial seeds and to limit the

number of referrals each seed could provide. To fully understand the structure of our final sample and to allay any residual concerns, we performed post-hoc cluster analysis to identify the potential existence of clusters within our sample. The analyses are based on analyzing the quantitatively coded responses to ten World Values Survey questions we embedded in the interview protocol. The responses to these questions provide a solid foundation for a cluster analysis because the questions were asked in each interview and with completely consistent wording. Potential bias introduced by missing values on a question are thereby minimized.

Cluster analysis was performed using both single-link and median-link methods. In each case the absence of a hierarchical structure indicates that there is indeed no clustering within our sample.¹ We also compared a number of characteristics of our sample with population characteristics for the same age, sex, and educational groups in South Korea. The results (available upon request) indicate that the sample provides a good representation of the country's highly-educated young adult population.

Data. Interviews typically lasted from 1.5-2.5 hours and were conducted in Korean by three female native speakers who were trained to follow the interview protocol exactly and to use equivalent probes when interviewees hesitated or answered in unclear ways. The interview was designed with both deductive and inductive purposes in mind; we aimed to test hypotheses drawn from second demographic transition theory and from McDonald's gender equity theory (2000a, 2000b). The interview was structured into five sections: employment and daily life (work hours and conditions, commuting time, daily schedule whether employed or non-employed); fertility ideals and intentions, ideal and actual household division of labor and childcare, attitudes towards various childcare arrangements, changes expected or experienced in work and home life with the birth of a child); gender-role attitudes, including 10 World Values Survey questions and additional questions related to attitudes towards working mothers and ideal childcare arrangements; perceptions and attitudes towards work-life policies and Korean government policies to boost the birth rate. The bulk of the interview questions were close-ended and were followed by a query as to why the interviewee feels the way he/she does or holds the attitude he/she expressed. In this way, we elicited individuals' own reasoning behind their viewpoints, thus producing their rationale for current and anticipated near-term decisions.

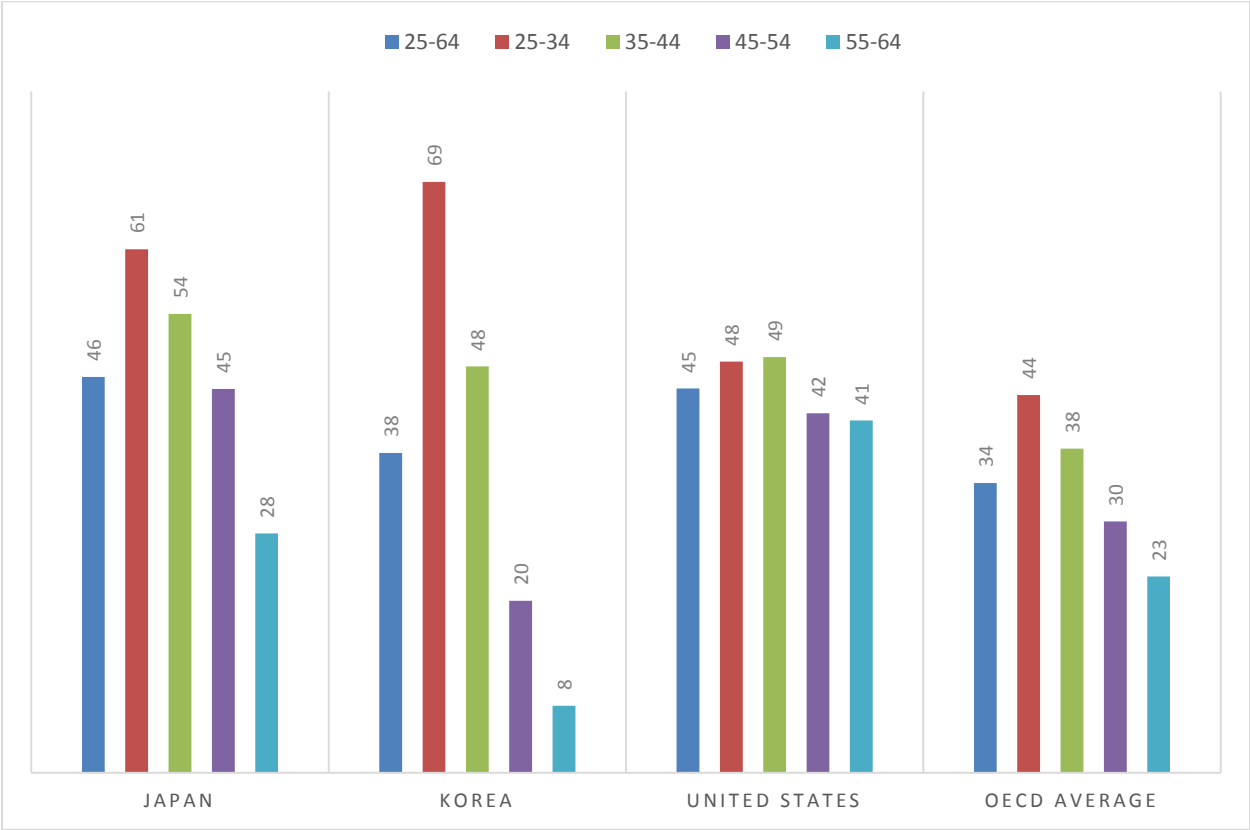
¹The dendograms from this analysis are available upon request.

Preliminary Analysis and Operationalization of Constructs

All interview transcripts were structurally (topically) coded using the qualitative software Dedoose. For the present paper, we utilized this topical coding to extract all excerpts pertaining to fertility ideals, intentions, individuals' perceived obstacles (if any) to fulfilling their fertility ideals, gender-role attitudes, workplace experiences, and ideal and actual household division of labor. We then hand-coded the interview extracts to identify overall themes (Glaser and Strauss 1967) so as to develop a set of comprehensive theoretical codes related to each of these topics. We also wrote a short memo detailing how each interviewee explained his/her fertility ideals and intentions.

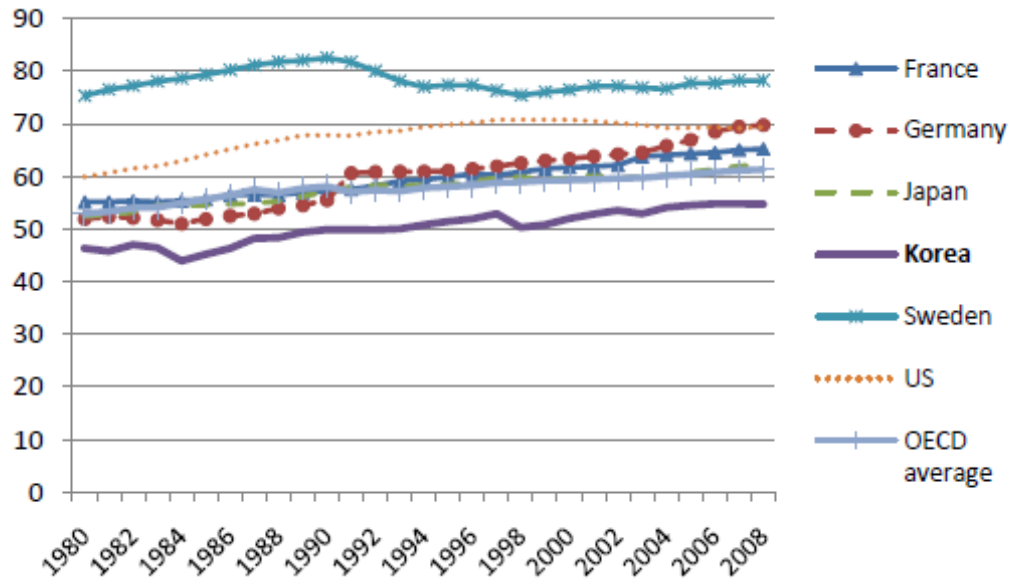
The early stages of our analysis of the interviews produced a number of emergent patterns. The first of these concerns the relationship between gender equity in the household and individuals' fertility intentions. We noticed that many interviewees who reported a highly gendered household division of labor have *higher*, not lower, fertility intentions than interviewees who have a more balanced division of labor with their spouse. This is what suggested to us the potential reverse association at the micro-level from what McDonald posits at the country level. The other emergent findings from our preliminary coding and analysis concern the operationalization of constructs on both the independent variable (gender equity) side and the dependent variable (fertility ideals and intentions) side. We discuss how we operationalized these, present our results, and conclude with implications for future studies of gender equity and fertility in lowest-low fertility contexts.

Figure 1. Percentage of Women (by Age) with Higher Education: Japan, Korea, U.S., and OECD Average



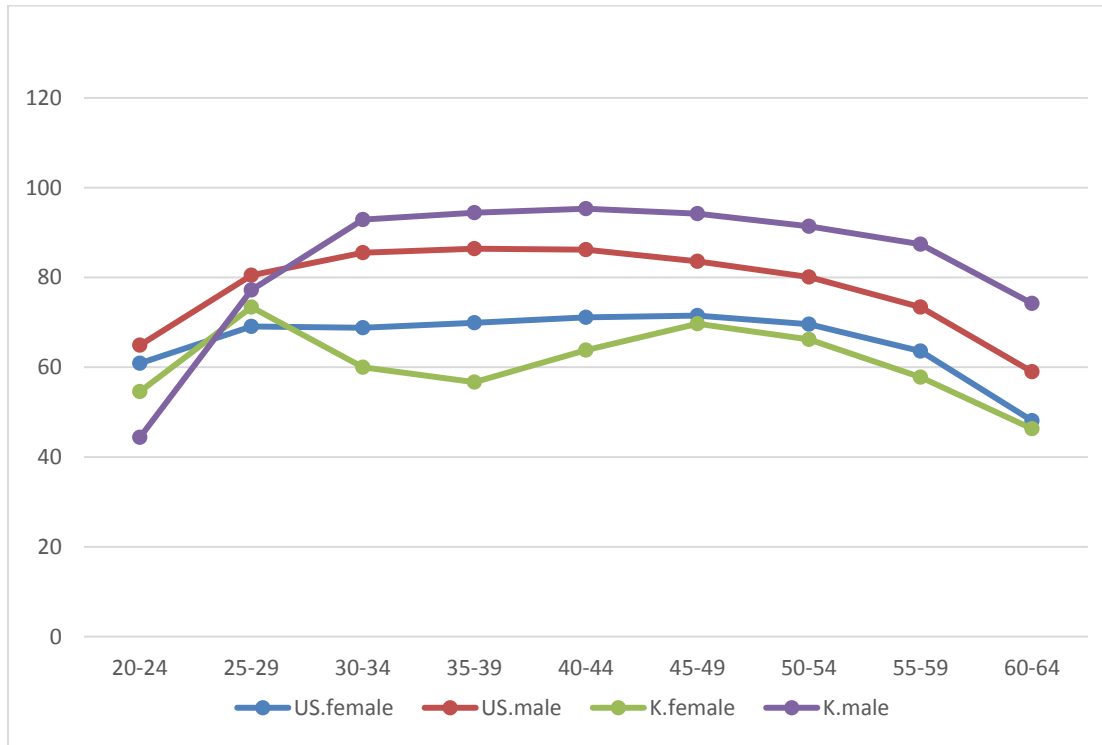
Source: OECD (2014a).

Figure 2. Female Labor Force Participation Rate: Korea and Selected OECD Countries



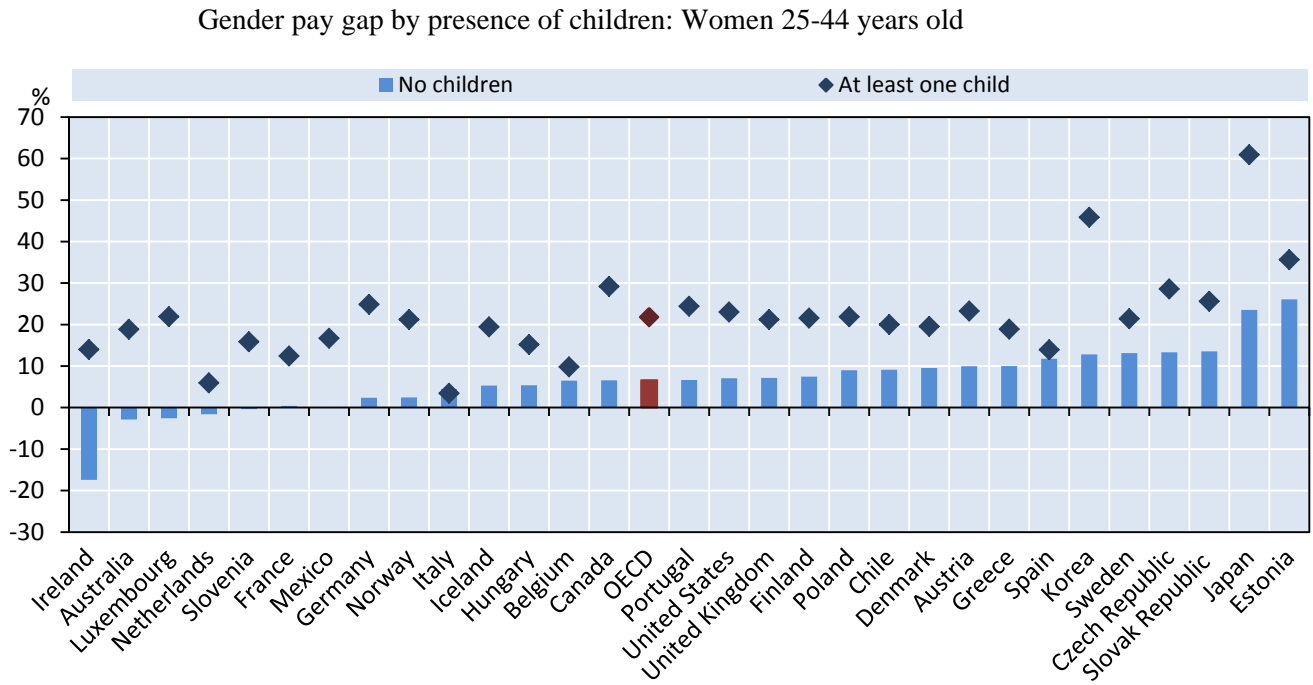
Source: OECD (2014b).

Figure 3. Labor Force Participation Rate by Sex and Age: Korea and U.S.



Source: Survey of Economically Active Population (Korea); Bureau of Labor Statistics (U.S.)

Figure 4. Motherhood Wage Penalty: OECD Countries

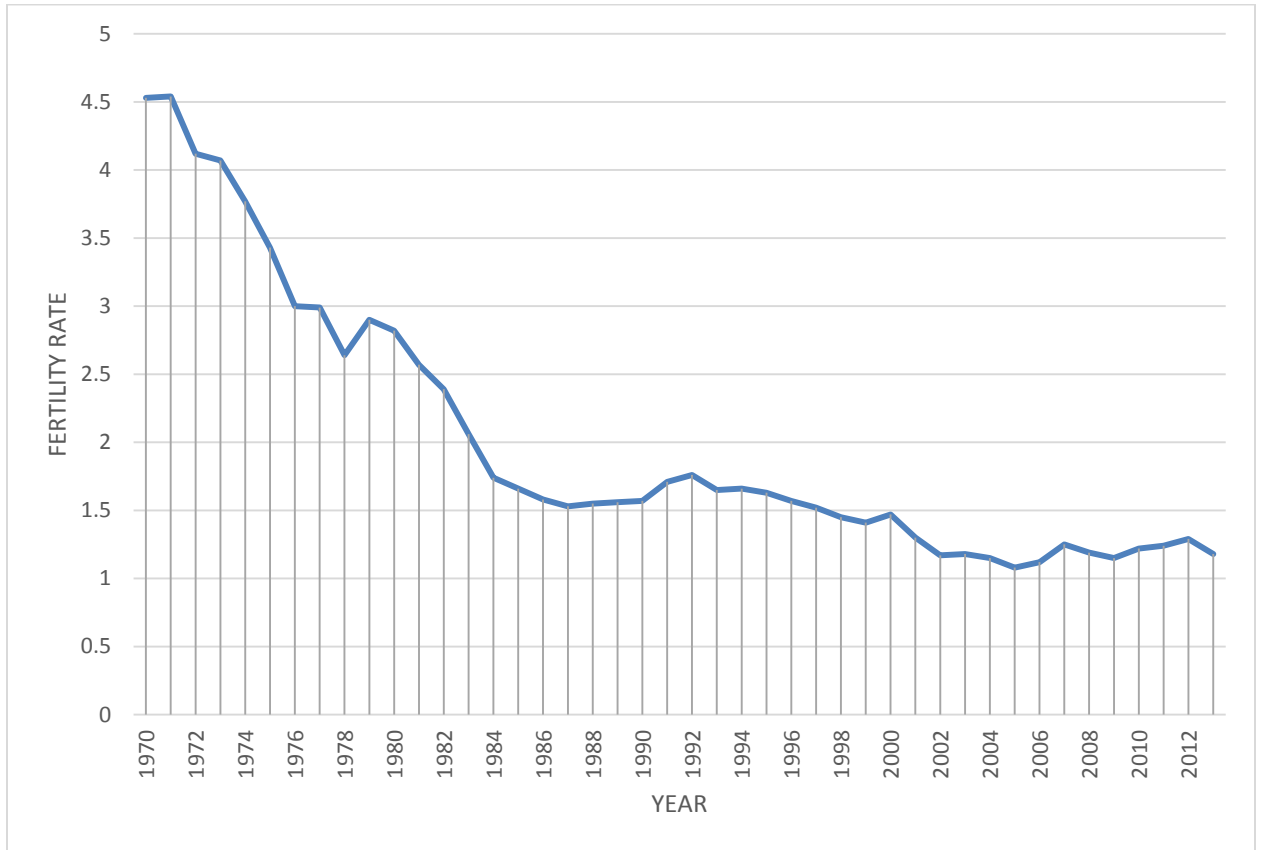


Source: OECD (2012).

Notes:

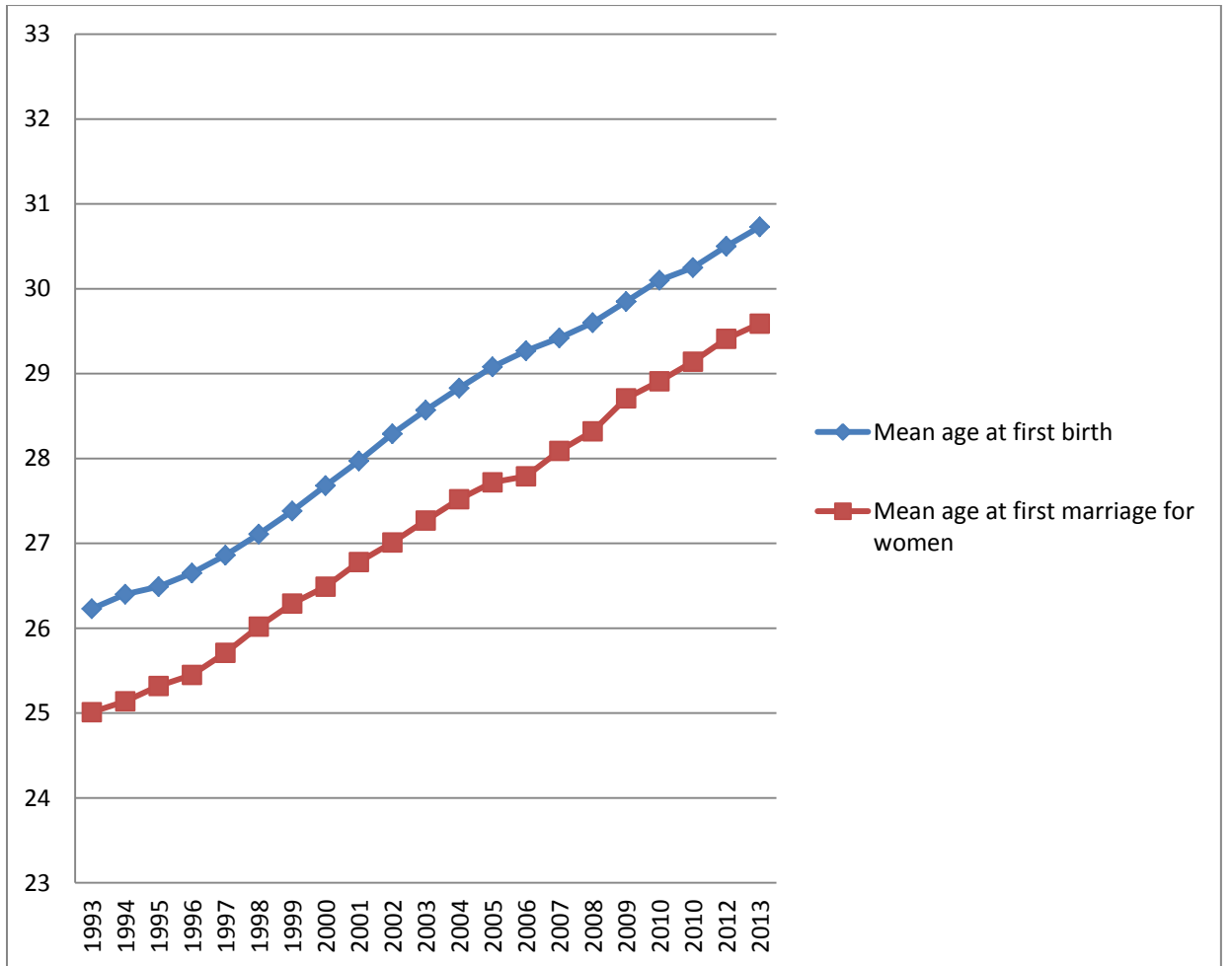
- a) Countries are arranged from left to right in ascending order of the gender pay gap for childless workers.
- b) Gender pay gap is defined as the difference between male and female median wages divided by male median wages; wages are calculated for men and women age 25-44 working full-time.
- c) Children are defined as less than 16 years old.

Figure 5. Total Fertility Rate for Korea, 1970-2013



Source: Statistics Korea, *Vital Registration Statistics*.

Figure 6. Change in Age at First Marriage and First Birth in Korea, 1993-2013



Source: Statistics Korea, *Vital Registration Statistics*.

Table 1. McDonald's Hypothesized Relationship between Relative Gender Equity and Aggregate Fertility

Gender equity in the private sphere

		Low	High
Gender equity in the public sphere	Low	High fertility	NA
	High	Low fertility	Moderate fertility

References

- Anderson, Thomas, and Hans-Peter Kohler. 2013. "Education Fever and the East Asian Fertility Puzzle: A Case Study of Low Fertility in South Korea." *Asian Population Studies* 9: 196-215.
- Arpino, Bruno, Gøsta Esping-Andersen, and Léa Pessin. 2015. "How Do Changes in Gender Role Attitudes Towards Female Employment Influence Fertility? A Macro-Level Analysis." *European Sociological Review*. Advance Access (published February 16, 2015).
- Bongaarts, John. 2001. "Fertility and Reproductive Preferences in Post-Transitional Societies." *Population and Development Review* 27, Supplement: Global Fertility Transition: 260-281.
- Brinton, Mary C., ed. 2001. *Women's Working Lives in East Asia*. Stanford: Stanford University Press.
- Brinton, Mary C. Forthcoming. "Intentions into Actions: A Norms-Based Explanation of Lowest-Low Fertility." In Christofer Edling and Jens Rydgren, eds., *An Invitation to Social Mechanisms: Micro-Foundations in Empirical Sociology*.
- Brinton, Mary C., and Dong Ju Lee. 2014. "Gender Essentialism and Low Fertility in Postindustrial Societies." Working paper, Department of Sociology, Harvard University.
- Brinton, Mary C., Yean-Ju Lee, and William L. Parish. 1995. "Married Women's Employment in Rapidly Industrializing Societies: Examples from East Asia." *American Journal of Sociology* 100: 1099-1130.
- Chang, Kyung-Sup. 2010. *South Korea under Compressed Modernity: Familial Political Economy in Transition*. Routledge.
- Chang, Kyung-Sup, and Min-Young Song. 2010. "The Stranded Individualizer under Compressed Modernity: South Korean Women in Individualization without Individualism." *The British Journal of Sociology* 61: 539-564.
- Choe, Minja Kim, and Robert D. Retherford. 2009. "The Contribution of Education to South Korea's Fertility Decline to 'Lowest-Low' Level." *Asian Population Studies* 5: 267-288.
- Cooke, Lynn Prince. 2008. "Gender Equity and Fertility in Italy and Spain." *Journal of Social Policy* 1: 123-140.
- Esping-Andersen, Gøsta, and Francesco C. Billari. 2015. "Re-theorizing Family Demographics." *Population and Development Review* 41: 1-31.
- Goldscheider, Frances, Eva Bernhardt, and Trude Lappegård. Forthcoming. "The Gender Revolution: A Framework for Understanding Family and Demographic Behavior." *Population and Development Review*.

- Hagewen, Kellie J., and S. Philip Morgan. 2005. "Intended and Ideal Family Size in the United States, 1970-2002." *Population and Development Review* 26: 507-527.
- Joung, Eun Hee, and You Seok Choi. 2013. "Factors Associated with the Plan for a Second Child among Married Women in Korea." *Health and Social Welfare Review* 33: 5-34 (in Korean).
- Jütting, Johannes P., Christian Morrisson, Jeff Dayton-Johnson, and Denis Drechsler. 2008. "Measuring Gender (In)Equality: The OECD Gender, Institutions and Development Data Base." *Journal of Human Development* 9: 65-86.
- Kaufman, Gayle. 2000. "Do Gender Role Attitudes Matter? Family Formation and Dissolution among Traditional and Egalitarian Men and Women." *Journal of Family Issues* 21: 128-144.
- Korean Women's Development Institute. 2013. *Korean Longitudinal Survey of Women and Families*.
- Mason, Karen Oppenheim. 1997. "Gender and Demographic Change: What Do We Know?" Pp. 158-182 in Gavin W. Jones, ed., *The Continuing Demographic Transition*. Oxford: Clarendon Press.
- McDonald, Peter. 2000a. "Gender Equity, Social Institutions and the Future of Fertility." *The Journal of Population Research* 17: 1-16.
- . 2000b. "Gender Equity in Theories of Low Fertility." *Population and Development Review* 26: 427-439.
- . 2013. "Societal Foundations for Explaining Low Fertility: Gender Equity." *Demographic Research* 28: 981-994.
- Mills, Melinda. 2010. "Gender Roles, Gender (In)equality and Fertility: An Empirical Test of Five Gender Equity Indices." *Canadian Studies in Population* 37: 445-474.
- Mills, Melinda, Letizia Mencarini, Maria Letizia Tanturri, and Katia Begall. 2008. "Gender Equity and Fertility Intentions in Italy and the Netherlands." *Demographic Research* 29: 1-26.
- Morgan, S. Philip, and Heather Rackin. 2010. "The Correspondence between Fertility Intentions and Behavior in the United States." *Population and Development Review* 36: 91-118.
- Myrskylä, M., Kohler, Hans-Peter, and Billari, Francesco. 2009. "Advances in Development Reverse Fertility Declines." *Nature* 460: 741-743.
- Ochiai, Emiko, and Barbara Molony, eds. 2008. *Asia's New Mothers: Crafting Gender Roles and Childcare Networks in East and Southeast Asian Societies*. Global Oriental.

- OECD. 2012. *Closing the Gender Gap: Act Now*.
- , 2014a. *Education at a Glance*.
- , 2014b. *StatExtracts* (<http://stats.oecd.org/Index.aspx>)
- Oláh, Livia Sz. 2003. "Gendering Fertility: Second Births in Sweden and Hungary." *Population Research and Policy Review* 22: 171–200.
- Park, Soomi. 2008. "A Study on the Relationship of Gender Equity within the Family and Second Births." *Korea Demography* 31: 55-73 (in Korean).
- Park, So Jin, and Nancy Abelmann. 2004. "Class and Cosmopolitan Striving: Mothers' Management of English Education in South Korea." *Anthropological Quarterly* 77: 645-672.
- Philipov, Dimitar, and Laura Bernardi. 2011. "Concepts and Operationalisation of Reproductive Decisions: Implementation in Austria, Germany and Switzerland." *Comparative Population Studies* 36: 495-530.
- Puur, Allan, Livia Sz. Oláh, Mariam Irene Tazi-Preve, and Jurgen Dorbritz. 2008. *Demographic Research* 19: 1883-1912.
- Rossier, Clémentine, and Laura Bernardi. 2009. "Social Interaction Effects on Fertility: Intentions and Behaviors." *European Journal of Population* 25: 467-485.
- Sobotka, Tomáš, and Éva Beaujouan. 2014. "Two is Best? The Persistence of a Two-Child Family Ideal in Europe." *Population and Development Review* 40: 391-419.
- Statistics Korea. (<http://kostat.go.kr/portal/english/index.action>). 2011. *Statistics of Dual-Earner Households and Women's Career Breaks*.
- , 2014. *Vital Registration Statistics*.
- Tsuya, Noriko O., and Larry L. Bumpass, eds. 2004. *Marriage, Work, and Family Life in Comparative Perspective: Japan, South Korea, and the United States*. Honolulu: University of Hawaii Press.
- Tsuya, Noriko O., Larry L. Bumpass, Minja Kim Choe, and Ronald R. Rindfuss. 2012. "Employment and Household Tasks of Japanese Couples, 1994-2009." *Demographic Research* 27: 705-718.
- U.S. Bureau of Labor Statistics. (<http://www.bls.gov/data/#employment>)