

Will Preparing Childcare Facilities Really Enable Women to Shine?



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Plan for Accelerated Resolution of Waitlisted Children

Prime Minister Shinzo Abe has made the advancement of women in the workforce a core of his strategy for growth. The first concrete measure being pursued in this regard is the preparation of childcare facilities under the Plan for the Accelerated Resolution of Waitlisted Children. Preparing childcare facilities directly enables more women to marry and have children while remaining in the workforce, that is, it increases their potential to balance marriage and childbirth with career (their potential for work-life balance). Here, I would like to consider the significance and anticipated effect of one of the Abe administration's highest priorities: the preparation of childcare facilities.

To reveal my conclusion in advance, I believe preparation of childcare facilities is both important and desirable, and is an appropriate choice for the highest priority policy. The reason is that increasing the potential for work-life balance is just about the only way to address the problems triggered by Japan's aging population and low birth rate, and preparing childcare facilities is the *only* policy that can improve the potential for work-life balance.

Aging Population/Low Birth Rate & the Japanese Economy

The issues of an aging population and a low birth rate are often discussed together, but it is productive to consider them separately. Generally speaking, a low birth rate is a situation in which the average number of children born per woman is below two. When the number of children born per woman is below two, the population will decline even if all the children who are born live to adulthood. An aging population, meanwhile, indicates a growing percentage of elderly people among the population as a whole, where "elderly" is typically defined as age 65 and over. Longer life expectancy is one cause of an aging population, but today the primary cause of Japan's aging population is its low birth rate.

According to calculations by the National Institute of Population and Social Security Research, Japan's total population is expected to fall to 86.73 million people by 2060, roughly two-thirds what it is today. Meanwhile, the percentage of the population aged 65 and over will reach 30% by 2025 and 40% by 2060. Such changes are expected to occur in many developed nations, but Japan leads the world in terms of both magnitude and rate of change.

A declining population and a growing percentage of elderly people both have a major impact on economic activity. At a stable labor force participation rate, a declining population means a decline in the labor force and, at a stable per capita GDP, it means a decline in Japan's GDP as a whole. Meanwhile, an aging population means a relative decline in

the proportion of those still working, increasing the social dependency burden. Even the potential for financial sustainability is called into doubt by the financial burden resulting from public pensions and other social security systems.

Aging Population/Low Birth Rate & Potential for Work-Life Balance

In order to address these issues of a low birth rate and an aging population, given that the low birth rate is the cause of the aging population it is essential at the very minimum to raise the birth rate over the long term. At the same time, the issue of an aging population is already manifested in rising social security costs and there is no time to waste in waiting for long-term efforts to resolve the low birth rate to take effect. In order to prevent financial ruin in the next 10 or 15 years, efforts must be made to secure an active labor force immediately. On this point, women still remain an underutilized source of labor; encouraging their participation in the labor market can help offset the aging population. In other words, the goals that Japan must aim to achieve are the resolution of the low birth rate and the incorporation of women into the workforce.

In order to achieve these two goals, it is essential to improve the potential for work-life balance. Marriage and childbirth are the primary reasons women leave the workforce and unless the potential for work-life balance is improved, the two goals are in a trade-off relationship. In fact, since the 1980s, the rising rate of women's participation in the workforce has been accompanied by a steady decline in annual births. If the potential for work-life balance were improved, however, the resolution of the low birth rate and the incorporation of women into the workforce would not be incompatible goals. Indeed, the greatest way to address the problems of an aging population and low birth rate is to create an environment in which women are able to continue working even if they marry or have children.

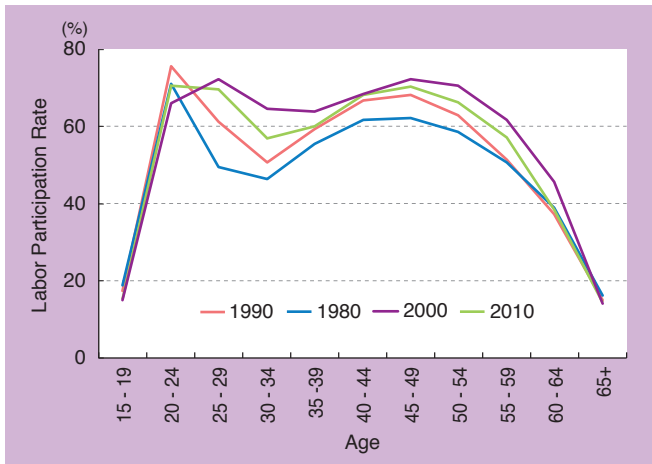
Isn't Potential for Work-Life Balance Increasing?

Despite how important it is, the actual potential for work-life balance barely improved at all from the 1980s, after the second generation baby boomers were born, through around 2005. The importance of the potential for work-life balance was recognized in the 1990s when the first package of measures to address the low birth rate — the Angel Plan — was drawn up, and many measures have been taken since then in the name of promoting women's employment and supporting childrearing. Nevertheless, there has been almost no improvement in the potential for work-life balance.

One reason may be that the very fact that the potential for work-life balance has not improved is itself poorly understood. Indeed, there

CHART 1

Labor participation rate of women by age group



Source: Compiled by the author based on labor force status by age group data from the Population Census for each year.

has been a belief, grounded in the flattening of the “M-curve”, that the potential for work-life balance was increasing.

The graph of labor participation rate by age group for women in Japan, as shown in [Chart 1](#), is known to trace an M-curve with two peaks at the early 20s and around the age of 50. This is due to women leaving the workforce in their late 20s for marriage and childbirth, and it has been thought that a flattening of the M-curve demonstrated an increase in the potential for work-life balance. Comparing 1980 and 2010 shows a recent flattening of the M-curve that many observers have argued indicated improvement in the potential for work-life balance.

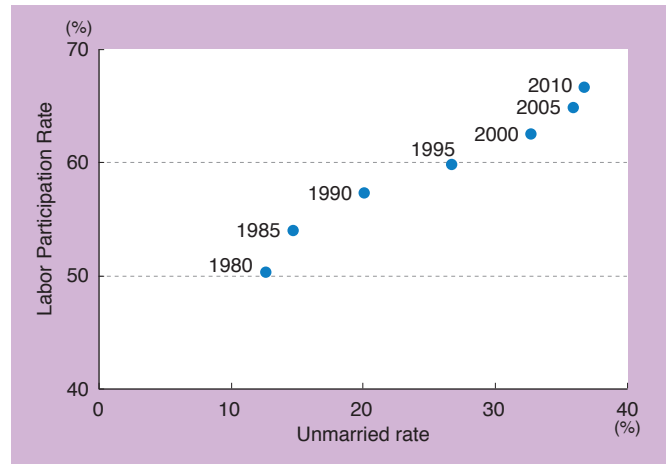
Most of the observed flattening of the M-curve, however, is the result of a tendency to remain unmarried or to marry later. [Chart 2](#) shows the relationship over time, for the period between 1980 and 2010, between marriage and employment for women aged 25 to 39. The horizontal axis indicates the unmarried rate (the percentage of women aged 25 to 39 who have never married), while the vertical axis indicates the labor participation rate (the percentage of all women aged 25 to 39 who are in the labor force). The data points shift toward the upper left over time, indicating on the one hand a rise in the labor participation rate and on the other an increase in the unmarried rate. In other words, the reason the labor participation rate for those in their late 20s no longer falls so sharply is not because women are continuing to work even after marriage and childbirth but rather because they are simply no longer doing so.

Trends in Potential for Work-Life Balance

How, then, can the potential for work-life balance be measured? In previous research (e.g. “The Possibility of Pursuing Both Marriage/Childbirth and Employment, and the Development of Nursery Schools” by Takashi Unayama, *The Japanese Economy*, 2012, Vol. 39 (1), M.E. Sharpe, Inc.), I identified “rate of leaving the labor market due to marriage/childbirth” as a useful index for grasping the potential for work-life balance. The ability of women who have married or given birth to continue working is the most direct indicator of how easy it is to achieve work-life balance.

CHART 2

Labor participation rate & unmarried rate



Source: Compiled by the author based on labor force status by age group data from the Population Census for each year.

Let me briefly explain how this index is calculated. As with [Charts 1](#) and [2](#), the calculation uses data from the Population Census organized by birth year cohort. A birth year cohort is a group of individuals who share the same birth year, and constitutes a “generation” in the sense of the “baby boom generation” or “second-generation baby boomers”. Each cohort’s marriage and labor force status can be grasped through the use of age group based data for each point in time. For example, a woman born in 1981 is 25 years old in 2005 and 30 years old in 2010. Age group based results for 25-year-olds from the Population Census for 2005 show that cohort’s marriage and labor force status (74% unmarried and 77% in the labor market). Doing the same using the 2010 census data for 30-year-olds shows a decline to 41% unmarried and 67% in the labor market. Looking at the difference in the data from these two points in time enables us to estimate that 33% (74%-41%) of women born in 1981 were married between the ages of 25 and 30 (between 2005 and 2010) and 10% (77%-67%) left the labor market.

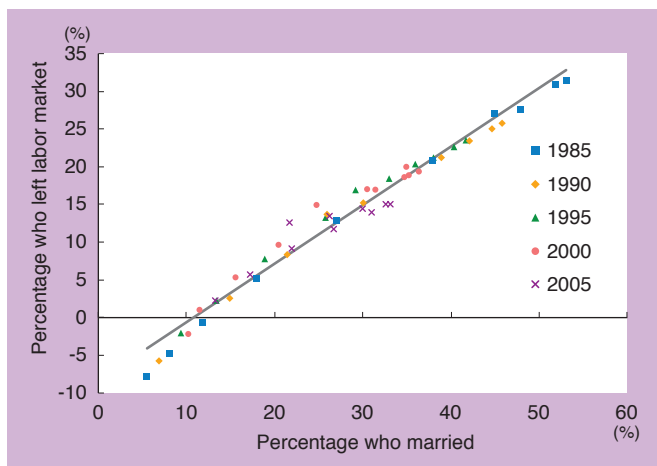
[Chart 3](#) plots the percentage of women who married (the drop in the unmarried rate) and the percentage of women who left the labor market (the drop in the labor participation rate), calculated in the same way for those who were 39 years old in 1980 (born in 1942) through those who were 25 years old in 2005 (born in 1981), for those years in which the Population Census was conducted (every fifth year). Despite differences in cohort and age, and the plotting of pooled data spanning a long period from 1980 to 2005, the data clearly trace a roughly straight-line progression for all points of observation.

[Chart 3](#) shows a line that is approximate to the data; the slope of this line indicates what percentage of women leaving the labor market is caused by each 1% rise in the percentage of women who married. In other words, it can be understood as the “rate of leaving the labor market due to marriage/childbirth”. The calculated slope is 0.863, so 86.3% of women who married or had children left the labor market. That this ratio is almost entirely unchanged for the 25 years through 2005 indicates that the potential for work-life balance has not changed over that period.

Furthermore, applying the same method to data by prefecture shows that the rate of leaving the labor market due to marriage/childbirth varies greatly by prefecture. For example, the rate of leaving

CHART 3

Relationship between marriage & leaving labor market as seen in cohort data



Note: Based on labor participation rate and unmarried rate by age (25-44, at one-year intervals) as drawn from Population Census data. Among the non-working population, students were included as part of the labor force.

Source: "The Possibility of Pursuing Both Marriage/Childbirth and Employment, and the Development of Nursery Schools" by Takashi Unayama, *The Japanese Economy*, Vol. 39 (1), 2012

the labor market due to marriage/childbirth is higher than 90% in both the metropolitan area of Tokyo, Kanagawa, Chiba, and Saitama and the Kinki area of Osaka, Kyoto, Hyogo, and Nara, but only around 60% along the Japan Sea in Yamagata, Toyama, Ishikawa, Fukui, Tottori, and Shimane, which are known for their high rate of women's participation in the labor market. This means that the potential for work-life balance varies greatly by region at the prefectural level.

Although the rate of leaving the labor market due to marriage/childbirth was almost completely unchanged through 2005, extending the data further to the most recent Population Census in 2010 reveals a major change ("Compatibility of Jobs and Marriage and Nursery Schools: Evidence from the 2010 Population Census" by Takashi Unayama, RIETI Discussion Paper 13-J-039, 2013). Measuring the rate of leaving the labor market due to marriage/childbirth for the five years from 2005 to 2010, using the same method, results in a rate of 62.4%, a decrease of more than 20 points.

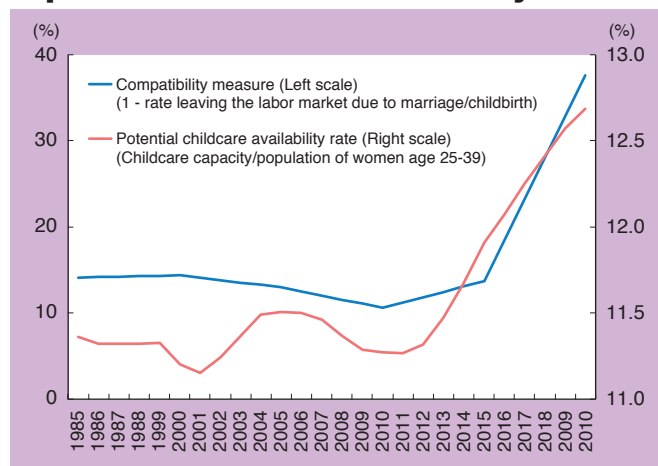
If the rate of leaving the labor market due to marriage/childbirth is an appropriate index of the potential for work-life balance, then this means that potential was almost entirely unchanged between 1980 and 2005, that there are large regional variations, and that the potential has improved greatly since 2005.

Determinant Factors of Potential for Work-Life Balance

Having understood the trends in potential for work-life balance in this way, it becomes even more important to work backwards to identify its determinant factors. The method for doing so is simple: list candidate factors that seem likely to influence the potential for work-life balance and narrow them down based on the criterion that if any factors exist that have a great influence on this potential, they will trend in a similar manner. For example, if a factor that fluctuated greatly between 1980 and 2005 were a determinant factor of the potential for work-life balance, then we would expect the potential to fluctuate greatly, too. Conversely, if in fact the potential for work-life

CHART 4

Change in potential for work-life balance & potential childcare availability rate



Source: Compiled by author based on population by age group figures from the 1980-2005 Population Census and childcare facility capacity figures from the Survey of Social Welfare Institutions.

balance were unchanged, we would expect major determinant factors to be found among factors that were also unchanged.

Even using only this very simple standard, most of the factors heretofore believed to influence the potential for work-life balance can be eliminated as candidates for major determinant factors. For example, childcare leave systems spread rapidly after being introduced in 1992, and there has been a steady decline in the percentage of three-generation households. If this were really an important determinant factor of the potential for work-life balance, we would expect to have seen a change in that potential over time. In the same way, it is difficult to imagine that any of the support measures newly implemented between the Angel Plan and 2005 had a great effect.

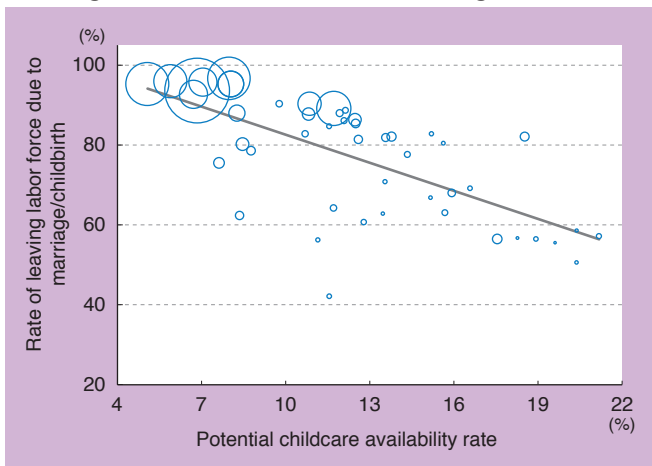
The only (so-far identified) policy that satisfies the conditions of a determinant factor under this standard is the status of childcare facility preparation. The author has developed an index for measuring the status of childcare facility preparation, called the "potential childcare availability rate", which is the ratio of childcare facility capacity to the population of potential childbearing women aged 20 to 39. Using this index to measure the status of childcare facility preparation for the 25 years between 1980 and 2005 we find that it was almost unchanged, moving in a range between 11.5% and 11.75%, but that in the five years between 2005 and 2010 it rose to roughly 13%. At the same time, when looked at by prefecture, there were great regional differences with results ranging from about 5% to about 20%.

Furthermore, the status of childcare facility preparation is also strongly correlated with the index of the potential for work-life balance. *Chart 4* shows the change over time to the index of the potential for work-life balance and to the potential childcare availability rate. For the post-2005 period in which the potential for work-life balance is thought to have risen, there was great improvement in the status of childcare facility preparation, consistent with the hypothesis that childcare facilities increase the potential for work-life balance.

In addition, *Chart 5* indicates the relationship by prefecture, through 2005, between the potential for work-life balance and the status of childcare facility preparation, plotting the potential childcare availability

CHART 5

Status of childcare facility preparation & rate of leaving labor market due to marriage/childbirth



Note: The size of each circle is proportional to the population of women aged 20-39.

Source: "The Possibility of Pursuing Both Marriage/Childbirth and Employment, and the Development of Nursery Schools" by Takashi Unayama, *The Japanese Economy*, Vol. 39 (1), 2012.

rate on the horizontal axis and the rate of leaving the labor market due to marriage/childbirth by prefecture, using data through 2005, on the vertical axis. The size of each point on the graph is proportional to the corresponding prefecture's population. The graph shows that prefectures in which childcare facilities have been prepared have lower rates of leaving the labor market due to marriage/childbirth. In addition, that the largest points are clustered toward the upper left of the graph shows that large metropolitan areas where the potential for work-life balance is low also have low potential childcare availability rates.

Effects of "Abenomics" on Advancement of Women in the Workplace

So far we have shown the necessity of raising the potential for work-life balance in order to resolve the problems facing the Japanese economy, and that the potential for work-life balance was almost entirely unchanged through about 2005 but has improved in recent years, and that the preparation of childcare facilities is believed to be practically the only determinant factor regulating the potential for work-life balance. Based on these facts, the Abe administration can be praised for identifying the preparation of childcare facilities as a matter of the highest policy priority.

So, what degree of impact can we expect from the Plan for the Accelerated Resolution of Waitlisted Children as presented in the administration's growth strategy? Here we can estimate the policy impact using the time series data for the relationship between potential childcare availability rate and the potential for work-life balance as shown in [Chart 4](#).

The Abe administration has committed to provide "childcare" to 200,000 people during a period of urgent and intensive effort through fiscal 2015. The population of women aged 25 to 39 — the denominator in the potential childcare availability rate — was roughly 17 million in 2010; increasing childcare facility capacity by 200,000 would raise the potential childcare availability rate by about 1.1 points.

According to [Chart 4](#), the potential childcare availability rate rose 0.8 points from 12.0% to 12.8% between 2005 and 2010, while the rate of leaving the labor market due to marriage/childbirth fell by 24 points. A simple extrapolation from these figures suggests that a 0.1 point improvement in the potential childcare availability rate should lead to a 3 point drop in the rate of leaving the labor market due to marriage/childbirth. In other words, a 1.1 point increase in the potential childcare availability rate should lead to a 33 point drop in the rate of leaving the labor market due to marriage/childbirth.

Furthermore, applying this to the current annual figure for women's first marriages of about 1 million, a decline of 33 points in the rate of leaving the labor market due to marriage/childbirth would correspond to roughly 330,000 more women per year continuing to work in the labor market. According to the Ministry of Health, Labour, and Welfare's Report on the Employment of Foreign Nationals, the increase in foreign workers in recent years is about 20,000-30,000 annually, but it is possible to utilize a labor force 10 times that size without generating any policy friction.

The preparation of childcare facilities, of course, creates a substantial financial burden. The annual cost of increasing childcare facility capacity is said to exceed 2 million yen per child, so increasing capacity by 200,000 means an annual financial increase of more than 400 billion yen. Nevertheless, this cost can be expected to promote the advancement of women in the workplace and mitigate many of the problems of an aging society.

Will Childcare Facility Preparation Really Move Forward?

As argued above, there are clear macroeconomic benefits to the preparation of childcare facilities, but when it comes time to actually carry out the policy we can expect a range of opposing interests to come to the fore. For example, major cities have the greatest lack of childcare facilities and lowest potential for work-life balance. Yet it is unclear whether distributing the budget in a way that targets large cities alone would be politically acceptable. There are also many other issues to be resolved such as whether childcare facilities currently operated by social welfare service corporations would be opened up to joint-stock companies, how to differentiate them from babysitters and other informal childcare, and whether the educational effect would be similar to kindergartens. As symbolized by the issue of waitlisted children, there are also issues related to admission criteria. There are many points on the demand side that must be worked out, such as how to determine who is admitted and the level of out-of-pocket expenses. Such conflicting interests may well have contributed to the delays so far in preparing appropriate childcare facilities.

Creating a society in which it is possible to achieve work-life balance is a critical first step toward realizing a society in which women can shine. We hope the Abe administration moves forward boldly in preparing childcare facilities, never losing sight of the fact that this is the only means of solving the issue of an aging population and a low birth rate. **JS**

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