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Japan's Fertility: More Children Please

Japan

Kohei Asao, Danila Smirnov, and TengTeng Xu

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ABSTRACT: Japan's fertility has declined in the past three decades. Raising Japan's fertility rate is a key policy priority for the government. Using cross-country analysis and case studies, this paper finds that the most successful measure to support the fertility rate is the provision of childcare facilities, particularly for children aged 0-2. Offering stronger incentives for the use of paternity leave can alleviate the burden of childcare on mothers, supporting fertility. On the other hand, there is limited evidence that cash transfers are effective in supporting fertility, based on international experience.

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Japan's Fertility: More Children Please

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JAPAN'S FERTILITY: MORE CHILDREN PLEASE[1]

Japan's fertility has declined in the past three decades. Raising Japan's fertility rate is a key policy priority for the government. Using cross-country analysis and case studies, this paper finds that the most successful measure to support the fertility rate is the provision of childcare facilities, particularly for children aged 0-2. Offering stronger incentives for the use of paternity leave can alleviate the burden of childcare on mothers, supporting fertility. On the other hand, there is limited evidence that cash transfers are effective in supporting fertility, based on international experience.

A. Introduction

1.   Japan's fertility has been on a declining path since the 1990s, but has stabilized at a low level in the past decade. The number of births reached a record low, while the fertility rate declined to about 1.26 in 2022. Japan's fertility rate is one of the lowest among G7 economies, but it remains higher than other East Asian advanced economies such as Korea, Hong Kong, and Singapore. Several reasons contributed to Japan's declining fertility rate, including later and fewer marriages, a high gender gap in unpaid housework, and the prevalence of women engaging in non-regular employment (contributing to a gender wage gap).

Fertility Rate
(In number of births per woman)

Source: World Bank.
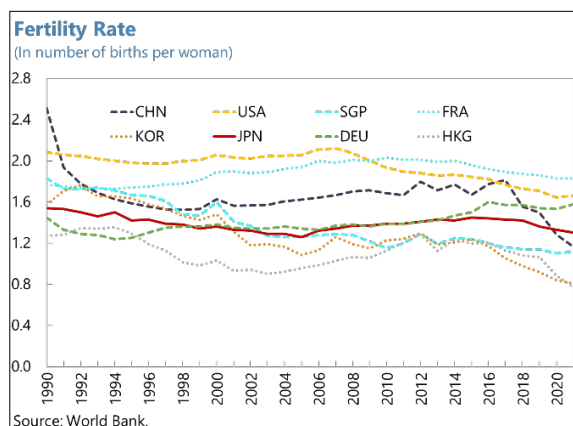
The increased availability of childcare facilities in the past decade, however, helped stabilize the fertility rate. Given a declining labor force due to an aging population, supporting fertility can help boost Japan's growth potential. At the same time, a higher fertility rate could help alleviate the pressure from growing public spending on healthcare and pensions.

2.   The authorities have announced initiatives to raise Japan's fertility rate, a key policy priority under the Kishida administration. They formulated the "Children's Future Strategy" in 2023, aimed to increase children-related spending by 3.6 trillion yen (approximately 0.6 percent of GDP) per year by FY2028. Additionally, the government announced plans to double the budget allocation for the Children's Agency by early 2030s. The strategy also includes plans to promote co-parenting and to strengthen support for child-rearing households including expansion of childcare facilities.

3.   Empirical and theoretical literature suggests that the policies that reduce education costs and opportunity costs for mothers to raise children have the most positive effect on fertility. Specifically, United Nations (2019, 2021) assess the effectiveness of policies to address low fertility globally and find that providing widely available, accessible, and high-quality childcare is

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[1] Prepared by Kohei Asao, Danila Smirnov, and TengTeng Xu (all APD). We thank Yan Carrière-Swallow and seminar participants at the Ministry of Finance of Japan for useful comments and discussions.

indispensable to sustaining higher fertility rates. In the context of the United States, Coskun and Dalgic (2023) provide a comprehensive examination of fertility dynamics in relation to contemporary labor market shifts, revealing a substantial negative impact of increased female labor participation on fertility rates. Bringing the focus to Japan, IMF (2020) uses prefecture-level data to show that a lower wage gap between male and female workers, a reduction in education costs, and a rise in childcare facilities are associated with higher fertility.

4.   This paper examines drivers of fertility based on cross-country regression analysis and case studies. Drawing on international experience, the most successful measure to support the fertility rate is the provision of childcare facilities, particularly for children aged 0-2. This policy is effective as it enhances parents' (particularly mothers') ability to continue to work during the early years of childhood as the scarring effect of 'lost' years on labor market outcomes is particularly high. Offering stronger incentives for the use of paternity leave can alleviate the burden on mothers. On the other hand, as discussed later, cash transfers do not have a significant impact on boosting the fertility rate.

B. Stylized Facts

5.   More Japanese are marrying later in life or remaining single, similar to other advanced economies. The average age at first marriage has increased gradually for both men and women in the past three decades, with more Japanese choosing the remain single. The 2021 Annual Population and Social Security Survey by the National Institute of Population and Social Security Research (IPSS) shows that the average number of children per married couple has remained relatively stable over the past four decades (2.19 in 1977 and 1.90 in 2021), indicating that the decline in the marriage rate has made a significant contribution to the declining fertility rate. In addition, the mean age of women at first childbirth in Japan is relatively high compared to peer economies. The IPSS survey also shows that the average number of children for women who married before 25 years old is 2.11, but this number decreases as the marriage age increases.[2] These facts suggest that later marriages and later childbirth also contribute to the decline in the fertility rate.

Age at the First Marriage
(In years)
Source: MHLW.

Mean Age of Women at Childbirth
(In years, 2021)
Sources: OECD.

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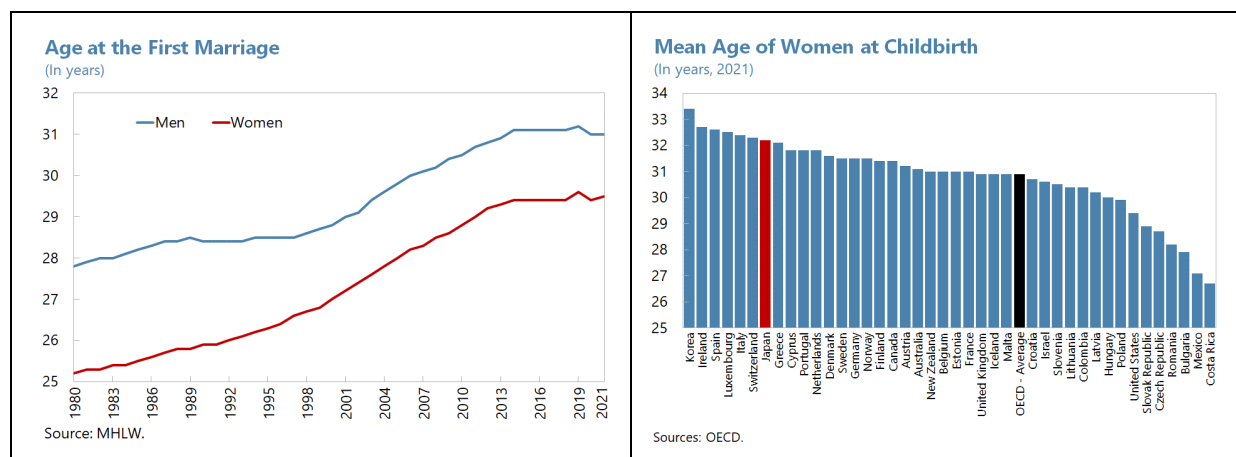
[2] It is 1.87 for women marrying between 25-29 years old, 1.61 for those marrying between 30-34 years old, and notably decreases to 1.03 for women marrying at 35 years old or more.

6.   The expansion of childcare facilities may have helped stabilize Japan's fertility rate in the past decade. The number of childcare facilities increased by 63 percent, with the waitlisted children reducing by 87 percent from 2013 to 2022[3]. The usage of childcare facilities also rose gradually, but remains relatively low at 52 percent in 2023, below other advanced economies. The expansion of childcare facilities is considered an effective policy measure for increasing the fertility rate. Unayama (2023) estimated that the expansion of childcare facilities since 2005 has led to an increase in the total fertility rate by 0.1.

Childcare Facilities
(In percent [LHS]; thousands [RHS])

Source: MHLW.
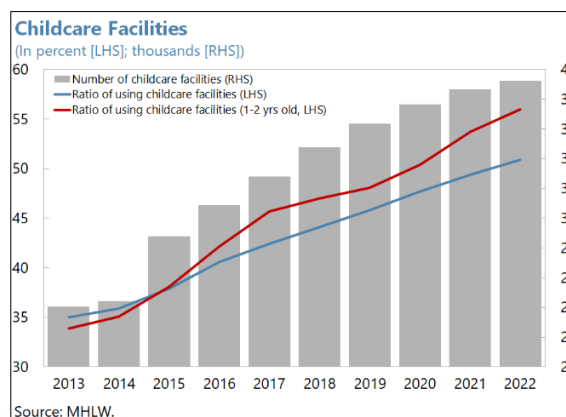
7.   While Japan has one of the most generous parental leave systems, the uptake remains very low. The length of paid paternity leave is about 50 weeks in Japan, with a replacement payout at 61 percent[4] of salary, which is more generous than most peer economies. However, the average duration of paternity leave taken in 2022 was less than 6 weeks (about 41 days). Many fathers chose not to take paternity leave, with the bulk of childcare responsibilities falling on mothers. A 2020 [MHLW survey](#) revealed that 25.9 percent of fathers who did not take paternity leave attributed their decision to "the company/supervisor's atmosphere discouraging paternity leave or a lack of understanding about it".

Length of Paid Paternity Leave
(In number of weeks)

Source: OECD.
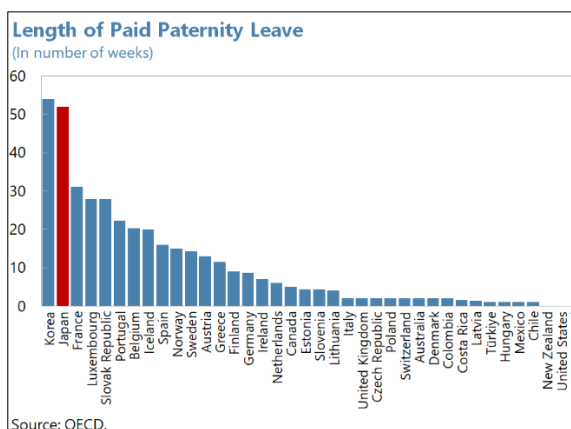
8.   The gender gap between men and women in unpaid housework in Japan is one of the largest among OECD countries. Japanese women engage in over five times more unpaid work (such as childcare and elderly care) than men. Conversely, men perform 166 percent of paid work compared to women. This imbalance indicates an unequal division of labor across genders between paid and unpaid work in Japan, which may dissuade women from having children. The IPSS survey shows that about half of the women who have fewer children than their preferred number attribute the reasons either to 1) "having more children will make managing their work (either paid or unpaid) difficult"; 2) "they cannot endure the psychological or physical burden of further childcare"; or 3) "because their husbands do not support unpaid household or childcare duties".

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[3] The number of waitlisted children nationwide is 2,680 as of September 2023. 90 percent of them are concentrated in the age group of 0-2 years old.

[4] OECD family database (https://www.oecd.org/els/soc/PF2_1_Parental_leave_systems.pdf).

Gender Gap in Unpaid Work
(In percent of time spent in unpaid work by men relative to by women, latest available year)

Gender Gap in Paid Work
(In percent of time spent in paid work by men relative to by women, latest available year)

Source: OECD.

Source: OECD.
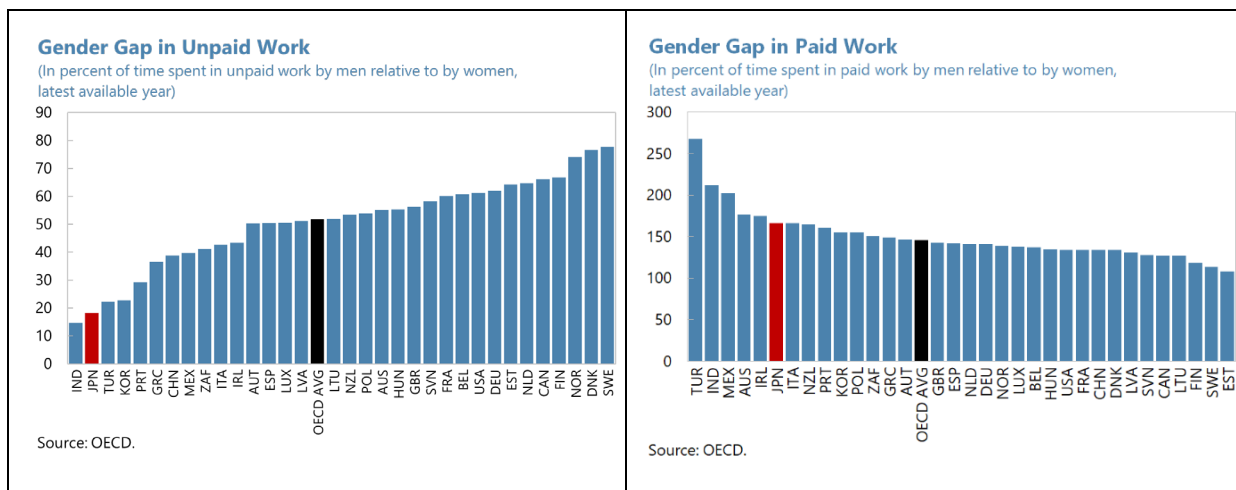
9.   Women in non-regular employment often face a larger reduction in salaries or fewer career opportunities after childbirth. Komura (2022) suggested that the reduction in earnings (termed the 'child penalty') is more significant for mothers employed in non-regular positions than for those in regular employment. Moreover, the IPSS survey shows that only around 38 percent of non-regularly employed women return to work, a rate significantly lower than the 79 percent among regularly employed women.[5] These findings suggest that a transition from non-regular to regular employment among women could reduce the 'child penalty' and enable mothers to sustain their careers, leading to less career concern and potentially a higher fertility rate. Indeed, the IPSS survey indicates that mothers in regular employment show more than double the preference to have more children.

Employment Status after One Year from Giving a Birth
(In percent, 2015-2019)

Regular-employed Nonregular-employed
Self-employed Others (including unemployment)

Source: IPSS.

Women's Intent for More Children
(In percent of female respondents who answered "yes" to the question of whether they plan to have more children)

Regular-employed
Nonregular-employed (Part-time/Temporary)

Source: IPSS.

10.   On the other hand, there is limited empirical evidence to suggest a tight link between cash transfers schemes and fertility rates. The cross-country data (34 countries included in the OECD family database) suggests that there is no evident correlation between cash

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[5] Among the regularly employed women, 74 percent return to regular employment one year after giving birth, while 5 percent transition to non-regular employment.

transfers and fertility rates. Previous studies have yielded mixed results on the treatment effect of cash transfers. Even among those studies reporting a positive relationship, the effect of cash transfers on fertility rates remains limited. Bauernschuster, Hener, and Rainer (2016) suggest that expenditures on childcare facilities have a five-time greater impact on the fertility rate than cash transfers.

Fertility Rate and Cash Benefit, 2019
(In percent of GDP [x-axis]; ratio [y-axis])

Source: OECD.
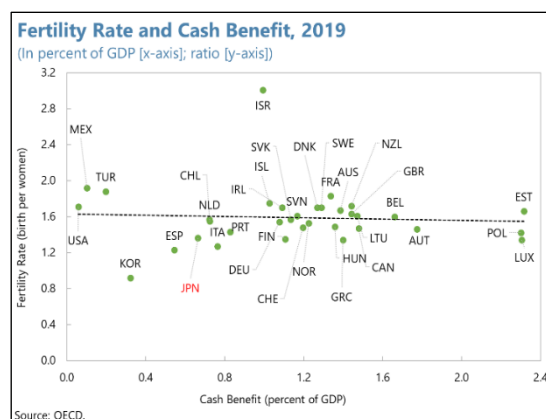
Box 1. Sweden and Germany: Case Studies of Children-Related Policies

Norway and Sweden - "daddy quota"

Norway and Sweden, despite facing a decline in the fertility rate over the past decade, are renowned for their implementation of successful childcare policies. They introduced the "daddy quota" scheme in 1993 and 1995, respectively. This policy reserves a part of paid parental leave periods for fathers, meaning that the family loses the paid-leave period if the father does not take leave. This gives a strong financial incentive for the father to take paternity leave, and the usage rate of paternity leave rose from 4 percent to above 90 percent from 1995 to 2003 in Norway. Sweden also has a high usage rate of paternity leave, which stands near 90 percent.

Germany – expansion of childcare facilities

Germany is a unique case among advanced economies, where the fertility rate has been on an upward trend in the past two decades. The authorities upgraded children-related policies in the early 2000s to narrow the gender gap in childcare, and the expansion of childcare facilities played a key role. They approved the Daycare Expansion Act in 2004 and Childcare Expansion Act in 2007 to introduce all-day schools and childcare facilities for children aged 0-2. Moreover, starting in 2013, parents have been entitled to request institutional childcare for their child from their first birthday onwards. The fees differ across federal states but generally depend on parents' income and are progressively subsidized by the states. As described in UNFPA (2019), due to these policy initiatives to expand childcare facilities, over 90 percent of children between the ages of three and six spend at least part of the day in kindergarten. However, childcare provision for children aged 0-2 still falls short of demand, particularly in the western part of Germany. In 2017, 45 percent of parents with children under the age of 3 expressed their wish to enroll them in childcare, yet only 33 percent secured enrollment.

Regarding parental leave policies, Germany has adopted the Nordic country model. In 2007, a new parental leave system similar to the Swedish "daddy quota" was introduced. Furthermore, Germany implemented a flexible parental leave system since 2015, allowing parents to take leave on a part-time basis for up to 36 months. The moderate increase in Germany's fertility rate over the past decade can be attributed to various factors, including the higher fertility rates among incoming migrants, but former research such as Sobotka, Matysiak, and Brzozowska (2019) suggests that policy reforms have contributed to a rise in fertility rates among highly educated women at later stages of childbearing.

C.   Data and Methodology

11.   In the empirical analysis, we construct a panel dataset for 42 OECD countries to analyze the drivers of fertility. On structural indicators, we capture the fertility rate, social policies, and socioeconomic conditions, such as the gender gap in unpaid work and the average duration of taken parental leave. We combine the structural variables with the GDP-per-capita series, real GDP growth, and CPI inflation to capture the business cycle, while controlling for linear and quadratic trends in country-level fertility rates.[6] In Table 1, we report estimated coefficients for the following linear regression, confirming a positive correlation between some of the policies and the fertility rate:

$$fertility_{i,t+1} = fertility_{i,t} + \{policies\}_{i,t} + age\ at\ childbirth_{i,t} + marriage\ rate_{i,t} + GDP_{i,t} + CPI_{i,t} + FE_i + t_{i,t} + t_{i,t}^2 + const$$

Table 1. Cross-Country: Linear Regressions Between Fertility and Policy Measures

	Lead of fertility rate						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Fertility rate	0.692***	0.650***	0.662***	0.672***	0.586***	0.548**	0.610***
	(18.71)	(13.80)	(13.89)	(17.16)	(8.04)	(3.25)	(7.73)
GDP per capita (10,000 USD)	0.0541	0.0943*	0.0299	0.048	0.059	0.209*	0.0906
	(1.67)	(2.11)	(0.61)	(1.42)	(1.19)	(2.10)	(1.16)
	Cash benefits	Children aged 0-2 in childcare	Children aged 3-5 in pre-primary	Expenditure on families	Parental leave duration	Parental leave (men)	Gender gap in unpaid work
Policy	1.65	-0.00216	0.123	2.38**	0.127	-0.132	-66.3**
	(1.57)	(-0.04)	(1.32)	(2.74)	(1.36)	(-0.58)	(-3.18)
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country FE, Year, and Year^2	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Constant	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	639	422	429	601	249	100	181

t statistics in parentheses; * p<0.05, ** p<0.01, *** p<0.001

12.   The difficulty in identifying successful policy measures lies in the issue of endogeneity. Crucially, countries with difficulties in supporting the desired fertility levels are more likely to implement the relevant policy measures to alleviate the problem. This implies that running the linear regression to identify the policy mechanisms that successfully increase fertility will yield biased results. One common approach used in the literature is to utilize natural experiments and analyze the performance of the given policy by looking at the child-related decisions of the households surrounding the moment of the introduction of a given policy. This method delivers results that possess a robust internal validity but are more challenging to interpret when comparing the policies between countries.

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[6] For detailed sources, see OECD (2005a), "Society at a Glance – OECD Social Indicators," OECD, Paris. Data on economic indicators are from the IMF.

13.   In this study, we address the concern of endogeneity and achieve the estimation results with more external validity using a novel approach. Effective fertility policies allow households to have more kids despite adverse economic conditions. We draw on the recent work by Coskun and Dalgic (2024) that introduced a novel model calibrated to US data. The authors demonstrate that a rise in female labor force participation and the associated increase in their contribution to household income, especially during recessions had a two-fold effect on fertility: it reduced the level of fertility and led to a high positive correlation between the fertility rate and the business cycle. Japan has experienced a similar labor market trend with a rise in female labor force participation in past decades, hence the policies that aim at reducing the time burden of having children for women (e.g., addressing the gender gap in unpaid work or enhancing childcare accessibility) are expected to simultaneously elevate the fertility rate and reduce its cyclicality.

14.   We rely on the results from the theoretical study above to formulate two assumptions crucial for our empirical strategy. Specifically, the first assumption relies on the idea above, that captures the simultaneous impact of a rise in female labor force participation on the decline in fertility level and its' increased cyclicality with business cycles. The second assumption is that children-related policies tend to be permanent once they are introduced, and households perceive these policies as fixed, changing their fertility decisions permanently. The business cycle introduces variation in the households' income that affects their child-related decisions on a much higher frequency than governmental policies. We use this exogenous faster-moving GDP growth as our identifying variation to find policies that reduce the cyclicality of fertility, consistent with our second assumption. Then, relying on the first assumption we argue that they do so by affecting the opportunity cost of time for women and conclude that same policies are effective in bolstering fertility rate level.

15.   Our baseline specification regresses the one-year ahead growth in the fertility rate on a set of explanatory variables. Becker (1960) and Butz and Ward (1979) highlighted the connection between fertility and the business cycle via the labor market outcomes of parents and used US data to illustrate its significance. In this study, we apply their logic to a cross-country setting. Our explanatory variables include real GDP growth and GDP per capita (in tens of thousands of US dollars). The control variables are the fertility rate level, the average age at childbirth, marriage rate, CPI inflation, country fixed effect, and a country-specific quadratic time trend:

$$\Delta fertility_{i,t+1} = \%\Delta GDP_{i,t} + GDP_{i,t} + \%\Delta GDP_{i,t} \times GDP_{i,t} + [fertility\ rate_{i,t} + age\ at\ childbirth_{i,t} \\ + marriage\ rate_{i,t} + CPI_{i,t} + FE_i + t_{i,t} + t_{i,t}^2 + const]$$

D.   Empirical Results

16.   First, we establish that fertility rate growth is procyclical with respect to the lags of GDP growth. This can be seen from the first regression in Table 2 and illustrates the positive relationship between households' economic conditions and willingness to have children. This relationship declines in strength with the level of GDP in the country since the share of households that are at the margin of being severely affected by the business cycle declines with average income,

which is illustrated by the negative coefficient on the interaction of the GDP growth and per-capita GDP in the second column.

Table 2. Baseline Cross-Country Regressions: Fertility Growth and Economic Growth

	Lead of fertility rate growth	
	(1)	(2)
Real GDP Growth (%)	0.138*	0.319***
	(2.44)	(3.76)
GDP per capita (10,000 USD)	0.0216	0.0428
	(0.84)	(1.68)
Real GDP Growth (%) * GDP per capita		-0.00896***
		(-3.80)
Total fertility rate (children per woman)	-9.741***	-9.512***
	(-7.59)	(-7.46)
Average age at childbirth	4.109***	4.032***
	(10.01)	(9.87)
Marriage rate (marriages per 1000 people)	0.705*	0.705*
	(2.32)	(2.31)
CPI	-0.00125	0.00257
	(-0.18)	(0.37)
Country FE, Year, and Year^2	Yes	Yes
Constant	-26251.1***	-28769.5***
	(-5.29)	(-5.98)
N	1549	1549

t statistics in parentheses
* p<0.05, ** p<0.01, *** p<0.001

17.   By the same logic as GDP per capita reduces the procyclicality of fertility rate growth, the introduction of a successful policy that boosts fertility should have a dampening effect on its cyclicality. Specifically, if the policy is successful, households should be less responsive to fluctuations of economic conditions in their childbearing decisions. The successful policy effectively "shields" families from adverse economic conditions. This means that by introducing the specific policy into the regression and its interaction with GDP growth, we should observe the negative coefficient on the interaction for the successful policies. When combined with our main assumption that the same policies are effective for raising the level of fertility and reducing its cyclicality, this helps us to identify the successful fertility-increasing policies. Notice that the coefficient on the policy itself is not crucial in this setting since it shows the effect of the one-time policy on the permanent change in the fertility rate growth, which should be zero in a large sample. Since our data is limited, some of the coefficients turn out to be significantly different from zero at conventional confidence levels. We can't use these coefficients to determine the successful policies, since they are biased, but nonetheless, they illustrate that there was a shift in the fertility rate once the policy was introduced. For example, the coefficients on "total expenditure on families" and "gender gap in unpaid work" are statistically significant. Whilst this can be seen as a confirmation of these policies' effectiveness in raising fertility, the insignificant coefficients for other policies can't be taken as evidence to reject their effectiveness , since the coefficients can be biased because of the

short dataset. Indeed, if the policy had been introduced a while back, the adjustment of the fertility level would already have happened, and there would be no further effect on its growth.

18. We run multiple regressions that test the effectiveness of different policy measures separately on the subsample of OECD member countries. From the Table 2 columns, we can see how these policies stack up against each other. The only policy that successfully boosts fertility is pre-school childcare enrollment. Notice that the effect of increasing enrollment by one percentage point is comparable to the effective increase in GDP per capita by 10,000 USD. Importantly, cash benefits have no significant effect on fertility, which illustrates that this commonly accepted practice has questionable effectiveness in boosting fertility. Importantly, for different policies the size of the dataset varies substantially. For some variables like the duration of parental leave and gender gap in unpaid work, the available dataset is short, which means that the insignificant coefficients can be an artifact of the small dataset.

$$\Delta fertility_{i,t+1} = \%\Delta GDP_{i,t} + GDP_{i,t} + \%\Delta GDP_{i,t} \times GDP_{i,t} + \%\Delta GDP_{i,t} \times \{policies\}_{i,t} + \text{controls}$$

Table 3. Main Cross-Country Regressions: Fertility Growth and Policies

	Lead of fertility rate growth						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Real GDP Growth (%)	0.559***	0.612***	1.238**	0.538***	0.0339	0.790	0.742**
	(4.27)	(3.84)	(2.71)	(3.50)	(0.16)	(1.14)	(3.10)
GDP per capita (10,000 USD)	0.0656	0.135**	0.0534	0.0541	0.0746	0.286*	0.125
	(1.96)	(2.99)	(1.18)	(1.59)	(1.49)	(2.32)	(1.67)
Real GDP Growth (%) * GDP per capita	-0.00655*	-0.00804*	-0.0110**	-0.00262	-0.0107*	-0.0319*	-0.0124*
	(-2.00)	(-2.17)	(-2.74)	(-0.75)	(-2.34)	(-2.25)	(-2.03)
Cash benefits for families (% of GDP)	1.512						
	(1.39)						
GDP Growth * Cash benefits	-0.194						
	(-1.66)						
Children aged 0-2 in formal childcare (%)		-0.0214					
		(-0.37)					
GDP Growth * Children 0-2 in childcare		-0.0111*					
		(-2.04)					
Children aged 3-5 in pre-primary (%)			0.120				
			(1.26)				
GDP Growth * Children 3-5 in pre-primary			-0.0114*				
			(-2.06)				
Total expenditure on families (% of GDP)				2.575**			
				(2.76)			
GDP Growth * Expenditure on families				-0.160			
				(-1.79)			
Parental leave duration (days)					0.0616		
					(0.60)		
GDP Growth * Parental leave					0.00306		
					(0.41)		
Parental leave duration: Men						-0.0578	
						(-0.25)	
GDP Growth * Parental leave: Men						0.00710	
						(1.00)	
Gender gap in unpaid work (ratio)							-65.54**
							(-3.25)
GDP Growth * G. gap in unpaid work							-1.225
							(-1.69)
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country FE, Year, and Year^2	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Constant	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	639	418	425	601	249	100	178

t statistics in parentheses; * p<0.05, ** p<0.01, *** p<0.001

E.   Policy Implications

19.   Sustained economic growth is fundamentally important for supporting childbirth. Our empirical analysis indicates that fertility rate growth is procyclical with respect to GDP growth. This means that sustained economic growth plays a fundamental role in raising fertility rate. In addition to implementing policies specifically aimed at raising fertility rates, the authorities should work on sound macroeconomic management to support continuous economic growth.

20.   Both the case study and the empirical analysis[7] suggest that a further expansion of childcare facilities to infants could help improve Japan's fertility rate. While the availability of childcare facilities has improved in the past decade, the waitlist remains relatively high for children aged 0-2. Also, it is worth noting that the waitlist numbers might be underrepresented since some children could be excluded from the waitlist statistics in certain cases[8]. One of the bottlenecks of a further expansion of childcare facilities is the shortage of nursery teachers. The job-to-applicants ratio of nursery teachers is 3.1, which is more than double of the national average of 1.4 as of January 2023. This shortage is driven by the relatively low wages of the nursery teachers, with their average salary about 17 percent lower compared with that of full-time employees. Policies should help address staff shortages and further expand the availability of childcare facilities, particularly for infants, which would help mothers return to the workplace with limited impact on employment, career, and income prospects. It will help alleviate women's concerns about having children by providing reliable childcare options after birth. Attracting foreign workers to address labor shortages (e.g., nursery teachers) could complement the support provided by childcare facilities.

21.   Policies should aim to facilitate fathers' contributions to home/childcare. The recent introduction of measures to facilitate parental leave[9] and the co-parenting initiative under the "Children's Future Strategy" are steps in the right direction. Going forward, a better designed parental leave system with incentives for fathers to take leave, for example, by introducing "daddy quota" (like in Norway and Sweden) could help improve the burden sharing of childcare and housework between fathers and mothers. In Japan, a "papa-mama parental leave plus" scheme[10] exists, but the incentive for fathers to take paternity leave is limited, since mothers can take paid leave for up to two years under certain conditions, regardless of the length of the father's leave. This means that fathers do not have strong incentives to use the scheme. In Sweden and Norway, the

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[7] The empirical analysis shows that a further expansion of childcare facilities has a dampening impact on the cyclicality of fertility rate growth, shielding households from the fluctuations in the economic conditions in their childbearing decisions.

[8] For instance, children whose parents are on parental leave are excluded from the waitlist. This means that if parents are taking leave because they cannot find appropriate childcare facilities (parents can extend their parental leave beyond the standard one year to the maximum period of two years), these children will not be included in the waitlist count.

[9] In April 2022, the authorities made it mandatory for employers to individually explain parental leave and relevant policies to employees with the aim of encouraging its adoption. In April 2023, they also set a new requirement for companies (with over 1,000 full-time employees) to annually disclose the status of childcare leave.

[10] In this scheme, the window in which a parent can take paid parental leave becomes wider from one year to one year and two months if both parents take parental leave.

duration of paid maternity leave is set to be shorter than the window in which parents can take parental leave. This means that the total paid period for a household can be extended only when fathers take paternity leave, incentivizing fathers to do so. Implementing a similar mechanism will incentivize more fathers in Japan to take longer paternity leaves.

22.   Further progress on workstyle reforms, including through teleworking, could also help support fertility and childcare arrangements. Since 2013, significant progress has been made on work-style reforms and childcare services, which helped boost female labor force participation. However, women tend to opt for part-time jobs that under-utilize their skills, given inflexible working schedules and long working hours of full-time positions (see *Selected Issues Paper*: Why So Few Women in Leadership Positions in Japan?). In this context, work style reforms, such as the enhancement of teleworking and flexible working hour arrangement, can help women by providing more flexible work arrangements while also allowing men to share more housework.

23.   Further labor market reforms, including reducing labor market dualism, is also essential. While the government has been successful in increasing female labor force participation over the last decade, a substantial gender gap remains. A large share of female workers are non-regular and non-career track workers with lower wages and limited skill development and career advancement opportunities. As the IPSS survey indicates, women under regular employment have a higher likelihood of returning to employment compared to those under non-regular employment. This, in part, reflect that women in regular employment tend to have better access to parental leave, which assists them in mitigating the 'child penalty' associated with wage reduction. The IPSS survey also shows that women in regular employment are more willing to have more children. These suggest that labor market reforms to encourage more regular employment and reduce labor market dualism would help women continue their career development and reduce financial concern of having children over the long term, thereby contributing to raising the fertility rate.

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