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Addressing demographic headwinds in Japan: A long-term perspective

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Addressing demographic headwinds In Japan: A long-term perspective

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By Randall S. Jones

ABSTRACT/RÉSUMÉ

Addressing demographic headwinds in Japan: a long-term perspective

Japan faces serious demographic headwinds. Under current fertility, employment and immigration rates, the population would fall by 45% by 2100 and employment by 52%. Given the challenges of a shrinking and ageing population, the government has pledged to "create a children-first economic society and reverse the birth rate decline". One priority is to strengthen the weak financial position of youth, which leads many to delay or forgo marriage and children. Making it easier to combine paid work and family is also critical so that women are not forced to choose between a career and children. Policies should also cut the cost of raising children, the key obstacle to couples achieving their desired number of children. Given the challenge of reversing fertility trends, Japan needs to prepare for a low-fertility future by raising productivity and employment, particularly among women and older people. Breaking down labour market dualism, which disproportionately affects youth, women and older people, is a priority. Abolishing the right of firms to set a mandatory retirement age (usually at 60) and raising the pension eligibility age would also promote employment. Foreign workers are helping ease labour shortages, but more needs to be done to attract foreign talent. A comprehensive approach is needed to raise fertility, the employment rates of women and older persons and inflows of foreign workers.

This Working Paper relates to the 2024 Economic Survey of Japan:

https://www.oecd.org/economy/japan-economic-snapshot/

Key words: Labour market, population ageing, fertility rate, older workers, mandatory retirement, pension eligibility age, female employment, work-life balance, foreign workers, dualism, non-regular workers.

JEL codes: J1, J2, J3, J7, J8

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Faire face aux difficultés démographiques : une perspective à long terme

Le Japon est confronté à de graves difficultés démographiques. Avec les taux actuels de fécondité, d'emploi et d'immigration, la population diminuerait de 45 % d'ici 2100 et l'emploi de 52 %. Face aux défis posés par une population en diminution et vieillissante, le gouvernement s'est engagé à « créer une société économique axée sur les enfants et à inverser la baisse du taux de natalité ». L'une des priorités est de renforcer la situation financière précaire des jeunes, qui conduit nombre d'entre eux à retarder ou à renoncer au mariage et aux enfants. Il est également essentiel de faciliter la conciliation du travail rémunéré et de la famille, afin que les femmes ne soient pas obligées de choisir entre une carrière et des enfants. Les politiques devraient également réduire le coût de l'éducation des enfants, principal obstacle qui empêche les couples d'atteindre le nombre d'enfants souhaité. Face au défi que représente l'inversion des tendances en matière de fécondité, le Japon doit se préparer à un avenir de faible fécondité en augmentant la productivité et l'emploi, en particulier chez les femmes et les personnes âgées. Mettre fin au dualisme du marché du travail, qui touche de manière disproportionnée les jeunes, les femmes et les personnes âgées, est une priorité. Supprimer le droit des entreprises de fixer un âge obligatoire de départ à la retraite (généralement à 60 ans) et relever l'âge d'éligibilité à la retraite favoriserait également l'emploi. Les travailleurs étrangers contribuent à atténuer les pénuries de main-d'œuvre, mais il faut faire davantage pour attirer les talents étrangers. Une approche globale est nécessaire pour accroître la fécondité, les taux d'emploi des femmes et des personnes âgées et l'afflux de travailleurs étrangers.

Ce document de travail concerne l'Étude économique du Japon de 2024 :

https://www.oecd.org/economy/japon-economic-snapshot/

Mots clés : Marché du travail, vieillissement de la population, taux de fécondité, travailleurs âgés, âge obligatoire de la retraite, l'âge d'ouverture des droits à pension, activité des femmes, équilibre vie professionnelle-vie privée, travailleurs étrangers, dualisme, travailleurs non réguliers.

Codes JEL : J1, J2, J3, J7, J8

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Addressing demographic headwinds in Japan: a long-term perspective

Randall S. Jones[1]

Japan is at the frontier of the global demographic transition. It has long faced labour shortages, reflecting the decline in the working-age population since 1995. Pre-pandemic, the job offer-to-applicant ratio averaged 1.4 over 2014-19. In March 2023, close to two-thirds of small and medium-sized enterprises (SMEs) reported labour shortages (JCCI, 2023). Demographic pressures will intensify, driven by Japan's low fertility rate and long life expectancy. More than half of children born in 2007 in Japan are projected to live to 107 (Christensen et al., 2009). If the total fertility rate remains around 1.3 and net immigration remains constant, Japan's population would decline from 125 million to around 96 million in 2060 and to less than 70 million in 2100 (Figure 1). By 2060, 39% of the population will be 65 or older and 25% will be over 75. The labour force would shrink by more than half by the end of the century, assuming unchanged employment rates by age group, as the proportion of elderly increases. Demographic change on such a scale would have major economic, social and fiscal impacts. As a front-runner in demographic change, Japan's policies to cope with a shrinking and ageing population will offer critical lessons to other countries.

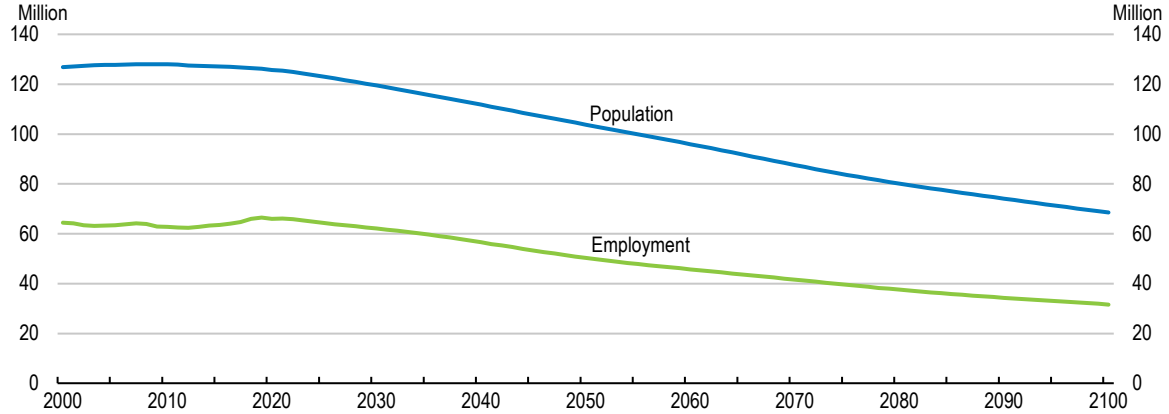
The share of Japan's elderly (aged 65 and over) doubled from 7% of the population to 14% in just 24 years, compared to 71 years in the United States and 115 years in France (Table 1). It then increased from 14% to 20% in only 12 years, making Japan the first country to reach that benchmark. Japan's elderly dependency ratio is significantly higher than that of other OECD countries and is projected to reach 79% by 2050 (Figure 2), reducing the number of working-age persons to 1.3 per elderly. Other countries also face shrinking and ageing populations. Indeed, Korea's elderly dependency ratio will overtake Japan by 2050 and several European countries will close the gap.

A smaller population would have some advantages, such as less environmental damage and congestion and less expensive housing. The increasing number of elderly will drive the "silver market", boosting demand for products in diverse fields, such as healthcare, financial services, housing and leisure, thereby driving innovation. The increased costs of a large elderly population would be partially offset by fewer children. For example, an average of 450 public schools closed permanently each year between 2002 and 2020 (MEXT, 2022a). However, a shrinking and ageing population makes it challenging to sustain the GDP per capita level and social insurance systems that provide health and long-term care and income to the elderly. According to national projections, Japan's health and long-term care and pension spending is set to rise by around JPY 17 trillion (2.7% of projected GDP in 2025) between FY2025 and 2040. In addition, depopulation in many areas of Japan is making it difficult to efficiently supply adequate public services and is worsening regional disparities, as highlighted in the *2019 OECD Economic Survey of*

[1] Randall S. Jones is an adjunct professor at Johns Hopkins University and a distinguished non-resident fellow at the Korea Economic Institute. The author would like to thank Alvaro Pereira, Isabell Koske, Vincent Koen, Müge Adalet McGowan, Tetsuya Yoshioka, Sebastian Barnes, Takashi Miyahara, Michael Abendschein and Jon Pareliussen, (Economics Department), Kei Oguro (former secondee in the Economics Department) and Willem Adema, Jonas Fluchtmann, Jonathan Chaloff, and Ana Damasdematos from the OECD Directorate for Employment, Labour and Social Affairs, Bert Brys from the OECD Centre for Tax Policy and Administration, and Olivier Denk from the Office of the Secretary-General for useful comments and suggestions on earlier versions of this paper. Special thanks to Natia Mosiashvili for valuable statistical and research assistance, and Jean-Rémi Bertrand and Sisse Nielsen for editorial assistance (Economics Department).

Japan. Regions facing depopulation report growing problems of unidentified land owners and abandoned houses (*akiya*). A government research institute reported declining quality of services due to labour shortages (Morikawa, 2018). Prime Minister Kishida stated that Japan is "on the brink of not being able to maintain social functions" (Prime Minister's Office, 2023a). The government has also stressed that it respects the diverse values and ways of thinking about marriage and having children. The goal is to remove obstacles for people who wish to have (more) children but believe it is not feasible, thereby supporting the "pursuit of happiness" and reversing the fall in fertility.

Figure 1. Japan's population and employment will decline significantly under current parameters



Note: Assumes that the total fertility rate remains constant at 1.3, net immigration continues at 100 000 per year and employment rates by gender and five-year age cohorts stay constant. Employment in all of the simulations in this paper includes self-employed and workers in family businesses.

Source: OECD calculations based on the OECD Long-term Model.

Table 1. Japan's population has been ageing rapidly

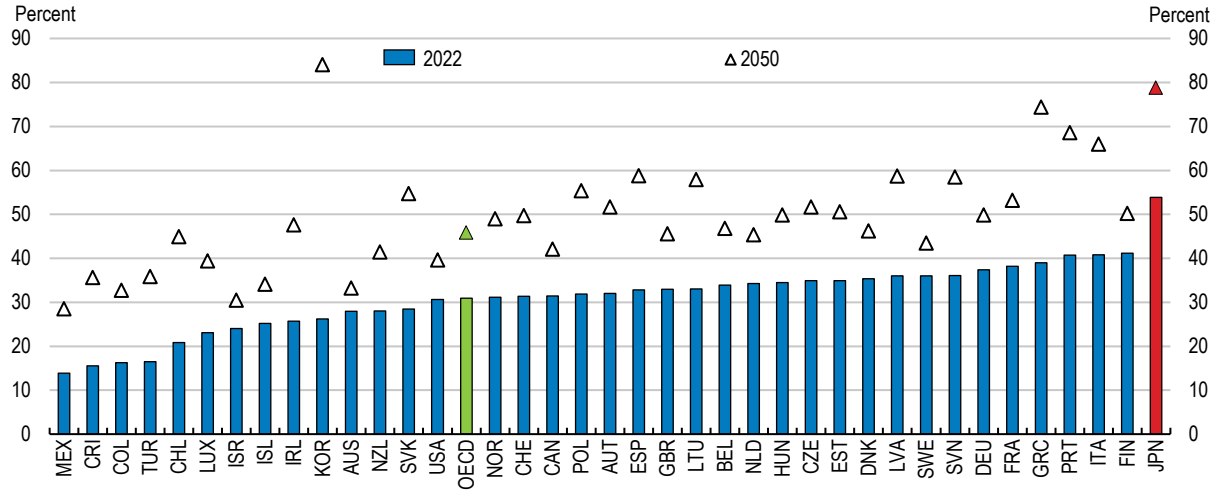
	Year when share of elderly (65 and over) make up:			Years elapsed	
Country	7% of the population	14% of the population	20% of the population	7 to 14%	14 to 20%
Korea	2000	2018	2025	18	7
Japan	**1970**	**1994**	**2006**	**24**	**12**
Germany	1931	1972	2008	40	36
United Kingdom	1929	1976	2025	47	49
Italy	1927	1988	2008	61	20
United States	1942	2014	2028	72	14
Sweden	1887	1972	2018	85	46
France	1864	1979	2028	115	39

Source: Jones, R. (2022), *The Japanese Economy: Strategies to Cope with a Shrinking and Ageing Population*, London: Routledge Press.

While the impact of higher fertility and employment rates would be significant, increasing productivity is crucial to addressing Japan's demographic challenge. Indeed, output per hour worked in Japan was 44% below the average of the top half of OECD countries in 2021. Policies to revive Japan's R&D engine and strengthen resource allocation are essential in this regard. Achieving Japan's objective of "Society 5.0", driven by digitalisation and artificial intelligence, as discussed in the *2021 OECD Economic Survey of Japan*, will play a key role. Japanese firms are world leaders in robotic technology. In 2020, robot density in Japan's manufacturing sector was the third highest in the world (International Federation of Robotics, 2021) and technology will enable robots to play an increasing role in the service sector and in daily household tasks. Other priorities to boost productivity and make the most of scarce workers include: exit and entry policies, reforming the low-productivity SME sector and improving human capital (*2017 OECD Economic Survey of Japan*); increasing international openness and promoting start-ups and venture-capital backed firms (*2015 OECD Economic Survey of Japan*); and regulatory reform and reform of the education system (*2011 OECD Economic Survey of Japan*).

Figure 2. Japan's elderly dependency ratio is high and will continue rising

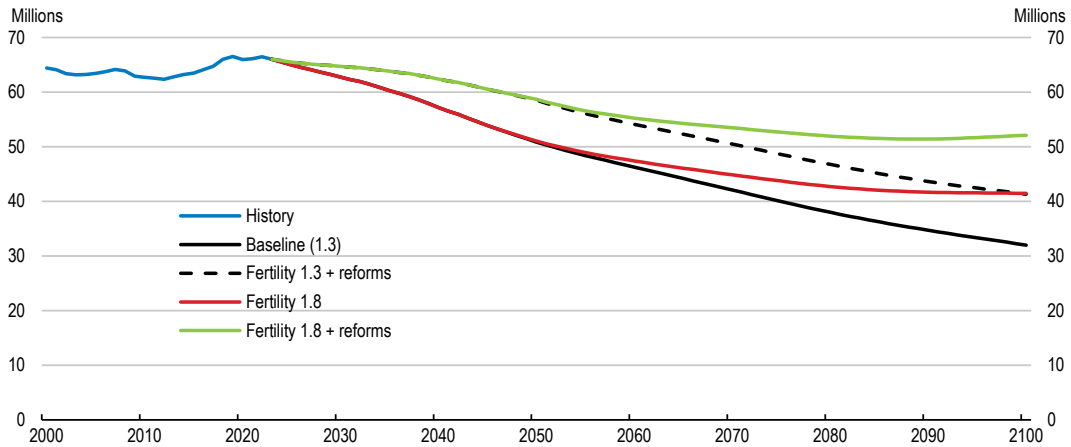
Old age dependency ratio



Note: Ratio of population aged 65 and above to population aged 20-64. Projections are based on medium fertility variant.
Source: OECD Demography and Population Statistics database.

This paper focuses on Japan's demographic challenge and suggests policies to mitigate the decline in the labour force. The first section considers trends in the fertility rate and measures to remove obstacles to childbearing. Prime Minister Kishida recently stated, "We must create a children-first economic society and reverse the birth rate decline" (Prime Minister's Office, 2023a). Achieving the government's fertility rate target of 1.8 would not be sufficient to avoid a sharp decline in the labour force. Indeed, if employment rates by age group and net inflows of foreign workers remained constant, total employment would stabilise at just over 40 million by 2080 – a drop of 38% from today (Figure 3).

Figure 3. Reforms to boost fertility, employment rates and foreign worker inflows would mitigate the decline in employment



Note: The reforms include; *i)* a doubling of inflows of foreigners to 200 000 per year; *ii)* a convergence of female employment rates to those of men by 2050; and *iii)* the employment rate for each five-year cohort from 60-64 to 70-74 converges to that of the preceding cohort (i.e., the rate for the 60-64 group would rise to the 2021 rate for the 55-59 age group, etc.) by 2050.
Source: OECD calculations based on the OECD Long-term Model.

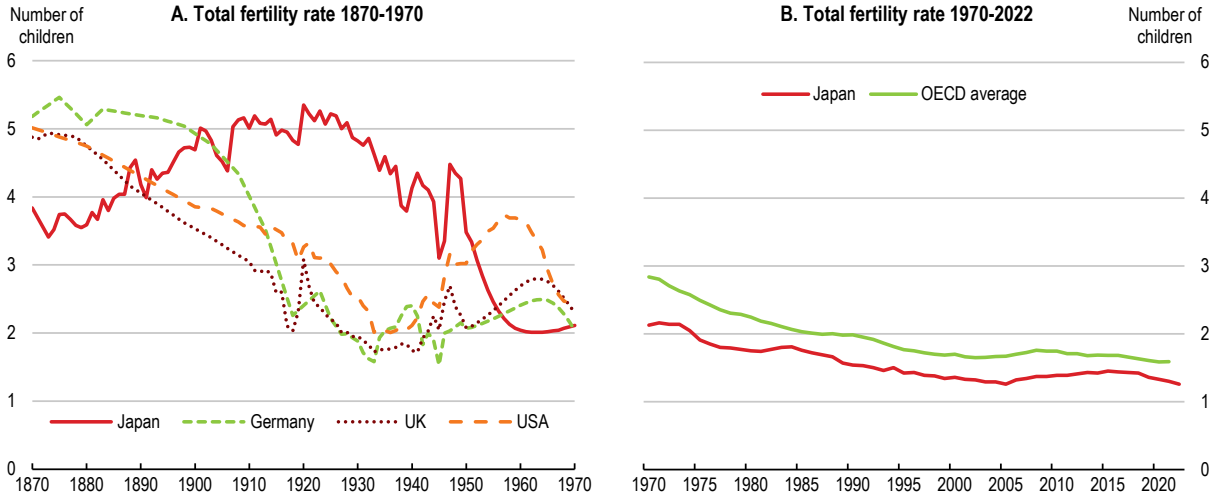
Given the difficulty of raising fertility, which partially reflects changing social norms, and the decades-long wait for a demographic pay-off from higher fertility, it is essential to prepare for a low-fertility future, in part by raising labour force participation. With the employment rate for men aged 15 to 64 already the highest in the OECD at 84% in 2021, such policies should focus on women and older persons, as well as foreign

workers. Despite the falling working-age population, employment rose by 5.6% over 2013-21, thanks to increased participation by women and older persons. Policies to further increase their employment are discussed in the second and third sections, respectively. The role of foreign workers in Japan is examined in the fourth section. A comprehensive strategy that includes increases in employment rates and foreign worker inflows would also keep employment just over 40 million in 2100 even if the fertility rate remained around 1.3. If a comprehensive strategy were accompanied by a rise in the fertility rate to 1.8, employment would remain above 50 million in 2100, about a quarter higher than if only the fertility rate increased (Figure 3). In sum, Japan should implement policies to reverse the decline in the fertility rate while removing obstacles to the employment of women and older persons and make greater use of foreign workers, which would have a more immediate impact on labour shortages.

Reversing the decline in the total fertility rate

Japan's compressed demographic transition (Table 1) is explained by its relatively high fertility rate in the first half of the 20th century. A declining fertility rate was a common feature of economic development in major countries beginning in the mid-1800s (Figure 4, Panel A). In contrast, Japan's fertility rose, averaging close to five between 1900 and 1940, while the rate fell close to the replacement level in the other countries. Following a post-World War II baby boom, Japan's fertility rate dropped sharply, remaining below two over the past 50 years (Panel B). After a modest rebound during the decade 2005-15, the downward trend resumed, parallel to the decline in the OECD area at large. In 2022, Japan's total fertility rate was a record low 1.26, the fourth lowest among OECD countries. The number of births in Japan fell from 2.7 million in 1949 to below 0.8 million in 2022 for the first time since 1899 and was only half the number of deaths. However, Japan's fertility rate exceeds that in some other advanced Asian economies, such as Singapore (1.1), Chinese Taipei (1.0), Hong Kong, China (0.9) and Korea (0.8), and is in line with China's 1.3.

Figure 4. Japan's total fertility rate has remained below two since 1975



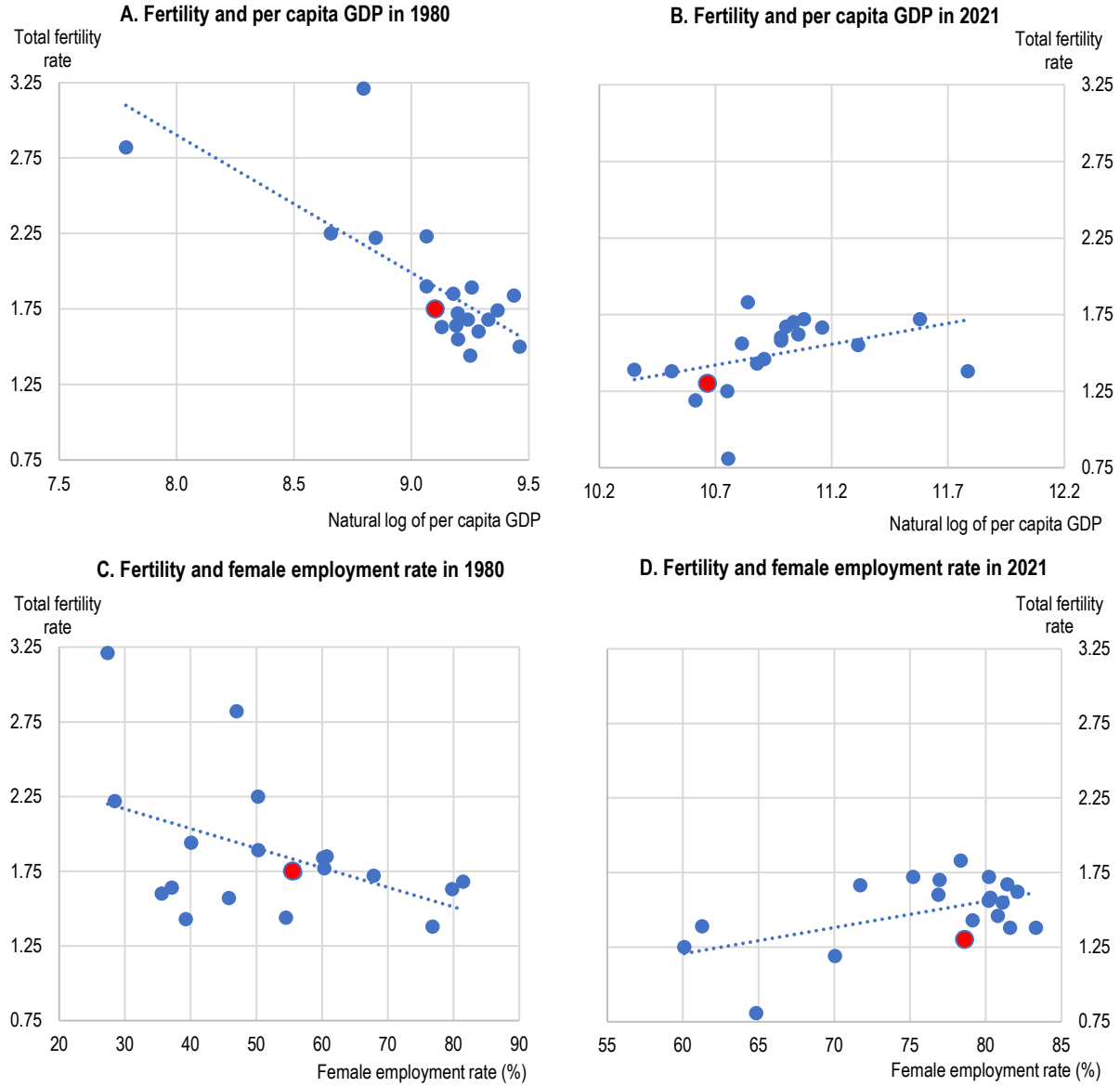
Note: The total fertility rate represents the number of children that would be born to a woman if she were to live to the end of her childbearing years and bear children in line with age-specific fertility rates in the specified year. Extrapolation filled the missing data points in Panel A.
Source: Doepke et al., 2022; World Bank; OECD, Family database; and Ministry of Labour, Health and Welfare.

Factors driving the fall in fertility: an international perspective

The cross-country relationship between per capita income and fertility has changed significantly over time. In 1980, it was negative (Figure 5, Panel A), as fertility had fallen in high-income countries for more than a century. This was also true within countries, as higher-income parents chose to have fewer children than their lower-income counterparts. The inverse relationship between income and fertility was often attributed

to the quantity-quality trade-off, as parents preferred to invest more in fewer children. A second explanation was the rising opportunity cost of children as women's education, employment and wages increased (Becker, 1960). The difficulty of balancing work and family commitments forced many women to choose between leaving their jobs to raise children or forgoing children to continue their careers, thereby leading to fewer births. This was reflected in a negative cross-country correlation between female employment and fertility in 1980 (Panel C).

Figure 5. The relationship of fertility with per capita income and female employment has evolved



Note: The correlation coefficient between fertility and income increased from -0.8 in 1980 to +0.4 in 2021, while the coefficient for fertility and the female employment rate rose from -0.5 to +0.5. The female employment rate is for the 25-54 age group. The figure includes 20 OECD countries for which data are available since 1980 (1983 for Belgium, Denmark, Greece and Luxembourg and 1984 for the United Kingdom). The larger red circles represent Japan.
Source: OECD calculations based on data from the World Bank; OECD, National Accounts and OECD, Labour Force Statistics.

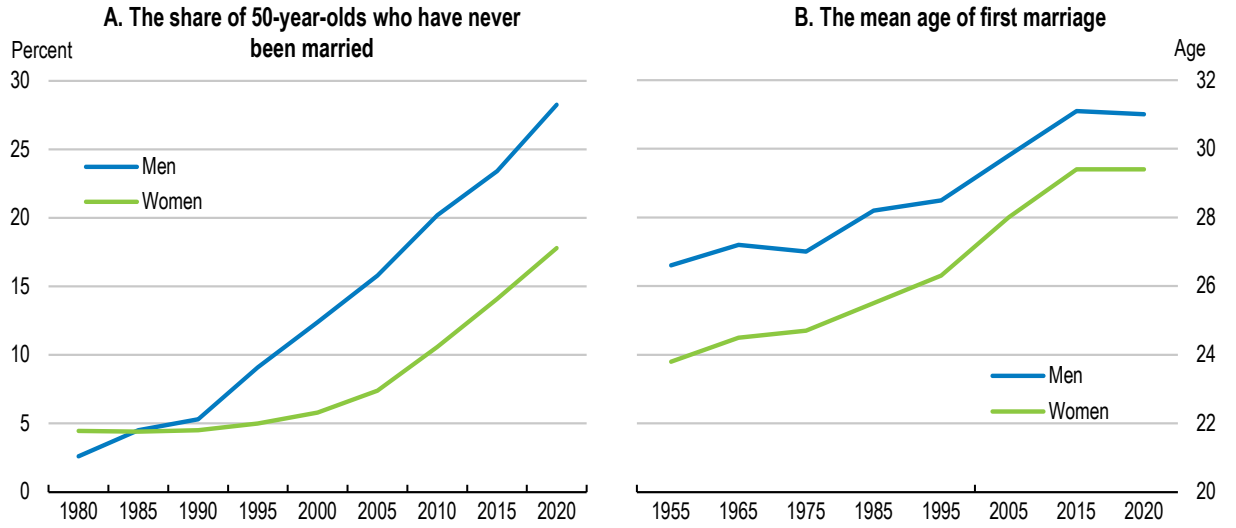
While the quantity-quality trade-off and the opportunity cost of children still influence fertility rates, they no longer drive them in high-income countries. Indeed, as the fertility rate continued to decline, the cross-country correlation between fertility and per capita income became positive in the mid-1980s (Adema,

2023) and remained so in 2021 Figure 5, Panel B). A similar shift occurred between fertility and female employment (Panel D and Oshio, 2019). This result is also found within Japan: a study of 1 890 municipalities found that municipalities with a higher female labour participation rate tend to have a higher total fertility rate (Kato, 2018), confirming that factors that enable women to combine employment and family responsibilities increase fertility.

Shifting social norms in Japan

Japan's marriage rate halved from ten per 1 000 persons in 1970 to 4.8 in 2019, with a rising proportion of the population never marrying. The share of 50-year-olds who had never married rose from less than 5% in 1980 to 28.4% for men and 17.8% for women in 2020 (Figure 6, Panel A). The declining marriage rate is the key driver of low fertility; the share of children born outside of wedlock in Japan has remained around 2% since the 1950s even as the marriage rate declined. The rate of people who remain single is likely to increase further. In 2022, 40.1% of men and 28.9% of women in their 30s had never been married. Among them, only 46% of both sexes wished to be married (Cabinet Office, 2022). As in other countries, life goals other than family and children, such as career advancement, wealth and self-realisation, have gained importance. Japanese who do marry wed at a later age. The rise in the average age of men's first marriage from 26.6 in 1955 to 31.1 years by 2015 and from 23.8 to 29.4 years for women (Panel B) has had a significant impact on fertility. Non-marital cohabitation in Japan is also low. Only around 3% of the 18-34 age group were cohabitating in 2021, according to the National Institute of Population and Social Security Research survey (IPSS) (IPSS, 2022).

Figure 6. The share of single persons and the mean age of marriage have risen significantly



Source: Statistics Bureau of Japan (2021), *2020 Population and Households of Japan*; Ministry of Health, Labour and Welfare (2021), *Handbook of Health and Welfare Statistics*.

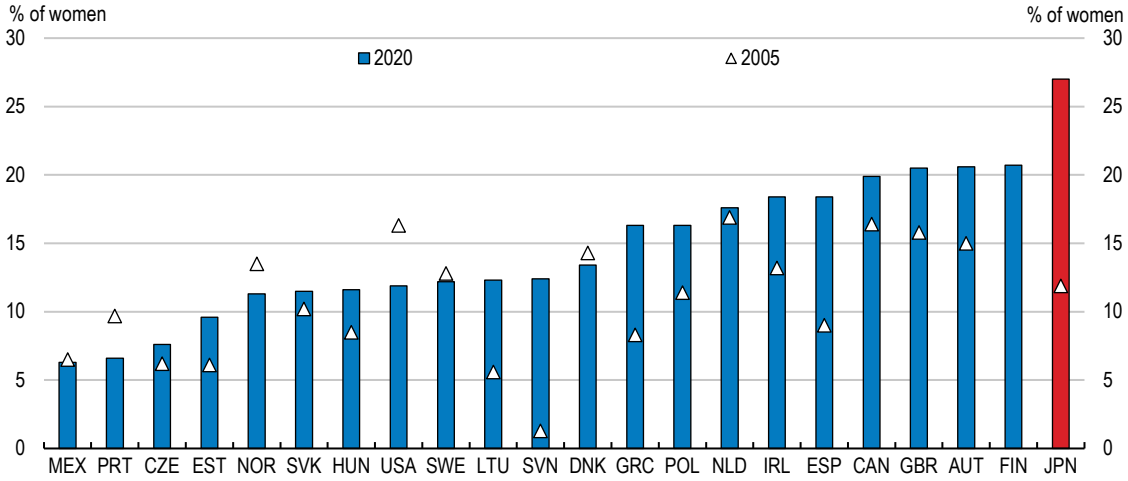
Delayed or forgone marriage has led to a steep rise in childlessness: the share of Japanese women who had not experienced any live births by age 50 increased from 11% in 2005 to 27% in 2020, the highest among OECD countries (Figure 7). In contrast, six OECD countries recorded a decline in childlessness between 2005 and 2020. The rise in the share of married couples in Japan who do not have children from 3.8% to 9.9% over 1992-2021 also contributed to the increase in childlessness. The proportion of people who agreed that "married couples should have children" fell from around 85% of both men and women to 37% for women and 55% for men over that period (IPSS, 2022).

A fall in the number of children per woman has also contributed to lowering the average fertility rate. The "completed number of births" (the average number of children born to couples married for 15-19 years)

remained constant at around 2.2 between 1977 and 2002 before falling to 1.9 in 2021 (Figure 8). The trend decline since 1977 in the number of children born to couples married five to nine years (from 1.9 to 1.6 children) and couples married less than five years (from 0.9 to 0.7) suggests that the completed number of births is likely to decrease further (IPSS, 2022). One factor discouraging parenthood may be increasingly intensive ("helicoptering") parenting norms. Parenting in Japan tends to be particularly intensive, and it is primarily mothers who look after children's daily needs and help them succeed in a highly competitive education system. A growing share of Japanese men faced with the (opportunity) costs of fatherhood may prompt some men to delay or reject having children because they feel unable to meet current standards of parenting (Doepke et al., 2022).

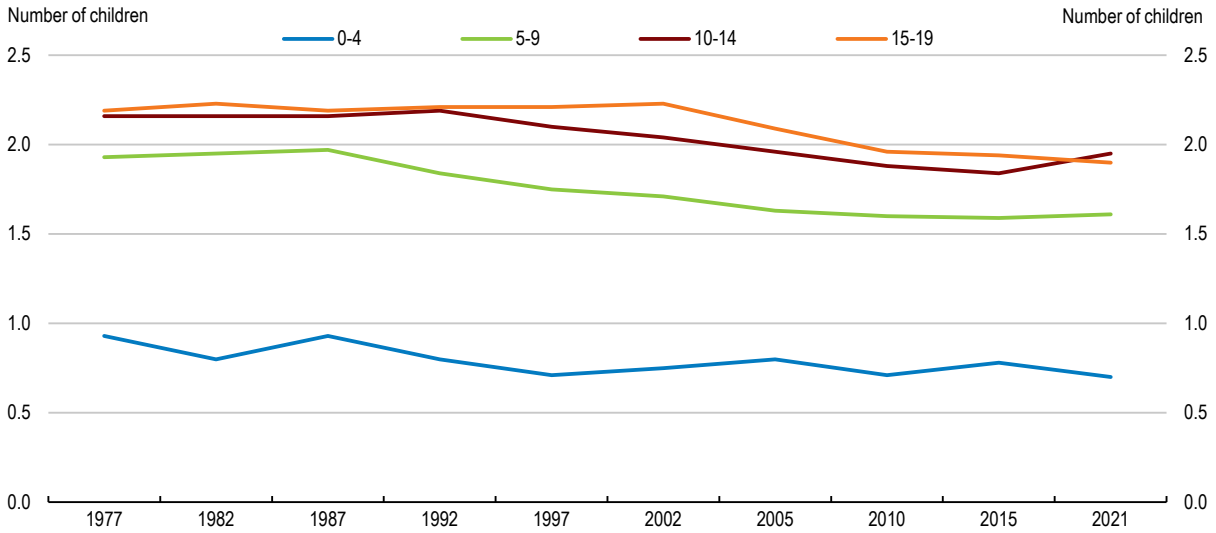
Figure 7. Childlessness is relatively high among Japanese women

The share of women aged 50 who have not experienced any live births



Note: For women born in 1955 and 1970, thus reaching age 50 in 2005 and 2020, respectively (1955 and 1965 for Canada, Greece, Ireland and Mexico). Data for the United Kingdom include only England and Wales.
Source: OECD, Family Database.

Figure 8. The number of children for couples by years of marriage has edged down

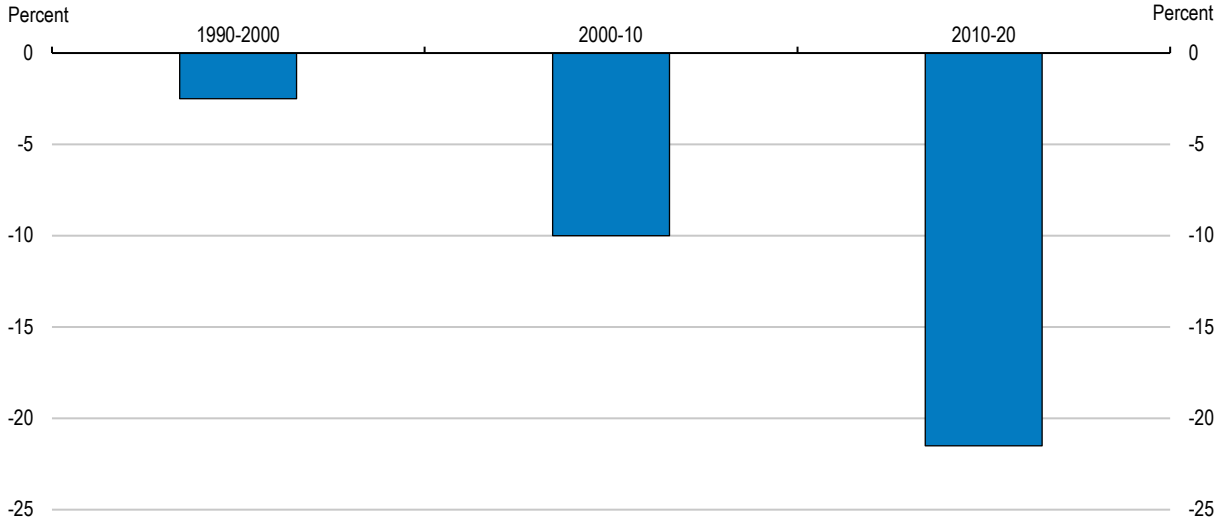


Note: 98% of children are born to married couples.
Source: National Institute of Population and Social Security Research (IPSS) (2022).

Policies to reverse the fall in Japan's total fertility rate

There is no simple explanation or solution for the low birth rate – it is a combination of complex social issues, despite many initiatives in Japan aimed at raising fertility (Box 1). Prime Minister Kishida stated, "In giving thought to the sustainability and inclusiveness of our nation's economy and society, we place child-rearing support as our most important policy" (Prime Minister's Office, 2023a). In addition to economic concerns, the increasing share of single men and women without family support may reduce the well-being and financial security of the elderly. The Prime Minister warned that Japan must address the issue "now or never"; "The next six to seven years are our last chance to see if we can reverse the (fertility) trend" (Prime Minister's Office, 2023b). The sense of urgency comes from the accelerating decline in the number of births (Figure 9). The number of live births fell by about 3% in the 1990s, 10% in the 2000s and 21.5% in the 2010s. If this trend continues, the number of births will fall at twice that speed in the 2030s.

Figure 9. The decline in the number of births is accelerating



Source: Cabinet Secretariat (2023a).

Nagi, an agricultural village of less than 6 000 people located 150 kilometres from Osaka and close to a Self-Defence Forces base, tried out a range of measures that contributed to an increase in its fertility rate from 1.4 in 2005 to 2.7 in 2021. First, childcare is inexpensive and flexible. Parents can leave their children at a childcare facility where mothers, staff and older volunteers watch their children for JPY 300 (USD 2.30) per hour. Second, Nagi provides a one-off payment of JPY 100 000 (USD 759) on the birth of each child. Third, Nagi provides support to reduce costs to families. For example, children receive free healthcare up to the age of 18, school meals are subsidised and three-bedroom apartments are available at a low monthly rent. In addition, an allowance is given for home childcare. Fourth, Nagi provides a subsidy for infertility treatment (Okamoto et al., 2019).

Box 1. Government policies aimed at increasing the fertility rate

Whether deliberately or not, policies shape the environment in which childbearing decisions occur. Following the "1.57 shock" in 1989, when the fertility rate reached a then record low after 20 years of decline, the government launched the Angel Plan in 1994, followed by the New Angel Plan in 1999. Both plans aimed to make it easier to raise children by:

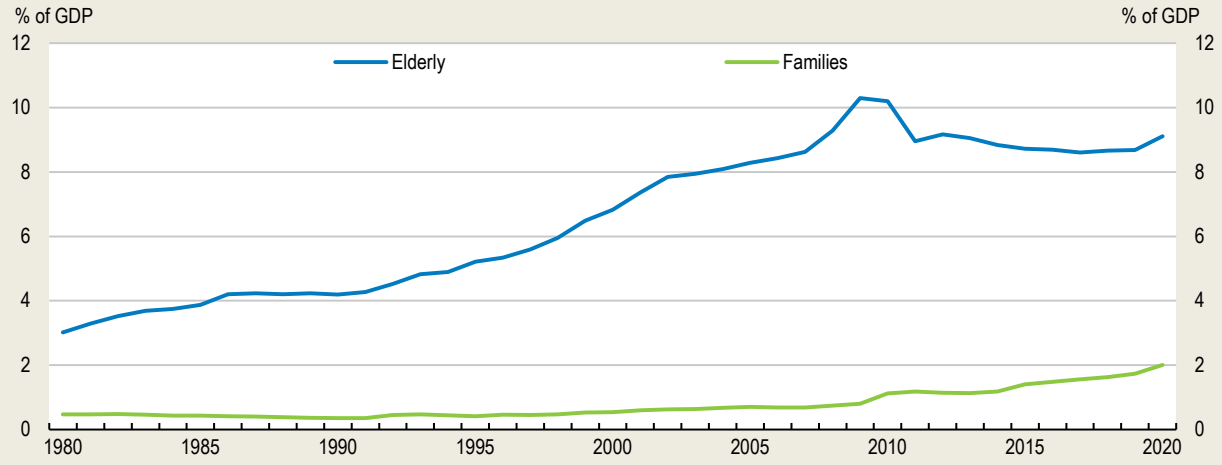
- Enhancing access to childcare services.
- Strengthening maternal and child healthcare facilities.

- Improving housing and public facilities for families with children.
- Promoting child development and improving the educational environment.
- Reducing the economic cost associated with child-rearing, including education.
- Making the employment environment more flexible for parents.
- Changing traditional gender roles and the work-first atmosphere in workplaces.

The Angel Plans were followed in 2009 by the Plus One Proposal. It aimed to increase family size by creating parent-friendly working conditions, partly by expanding childcare capacity by 50 000. A monthly allowance per child was introduced in 2010. Currently, the government offers JPY 10 000 to 15 000 (USD 75 to 113) per month for each child until graduation from middle school, with some limitations on higher-income families (the allowance is reduced to JPY 5 000 if the annual income of the head of household is JPY 9.6 million or more, and eliminated if it exceeds JPY 12 million).

The government introduced additional measures during the Abe administration. *First*, Japan added 530 000 childcare places over FY2013-17, aiming to eliminate waiting lists by 2018. With waiting lists still significant, the 2017 "New Economic Policy Package" pledged to add another 320 000 childcare places to eliminate the waiting lists by FY2021, but fell short of this objective. *Second*, the government introduced free early childhood education and care for children aged three to five in 2019. *Third*, the authorities set a target of raising the share of fathers taking parental leave from 6% to 13%. Such measures boosted government spending on children and families from 0.6% of GDP in 2003 to 2.0% in 2020 (Figure 10). Despite these increases, spending on the elderly remained more than four times higher than on children and families.

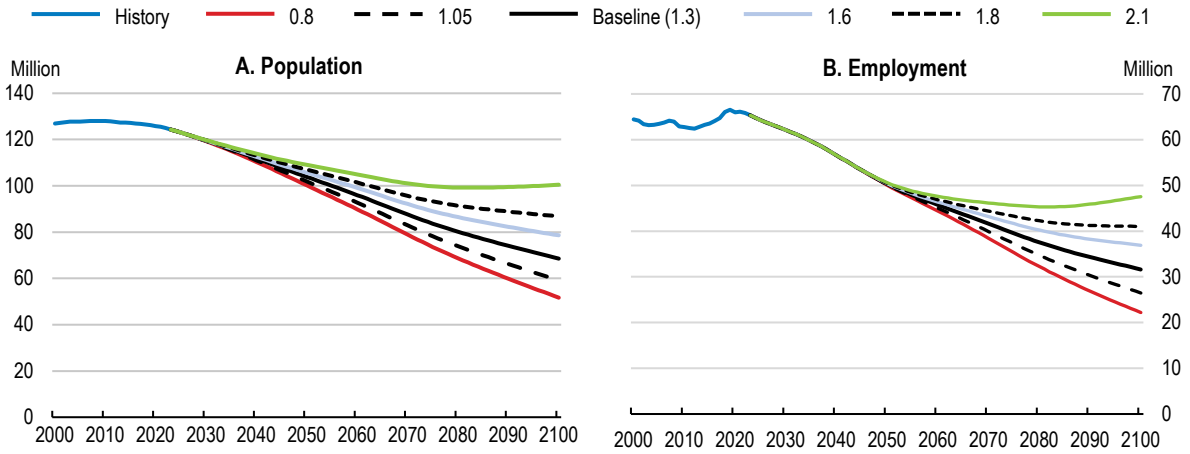
Figure 10. Government spending on elderly far outpaces outlays for families



Source: National Institute of Population and Social Security Research (2021), *The Financial Statistics of Social Security in Japan FY2020*.

Changes in the fertility rate lead to large differences in population size over the long run (Figure 11, Panel A). If the rate rose to the government target of 1.8, set by former Prime Minister Abe, Japan's population would be 87 million in 2100, 27% above the baseline scenario of 68 million with the fertility rate remaining at 1.3. In contrast, if the rate fell to 0.8 (the rate in Korea), the population would be only 52 million in 2100. Changes in fertility influence the employment rate from 2050. With constant employment rates by gender and five-year age cohorts, employment in 2100 would be 30% higher (lower) under the 1.8 (0.8) fertility assumptions (Panel B).

Figure 11. Population and labour force projections under different fertility scenarios



Source: OECD calculations based on the OECD Long-term Model.

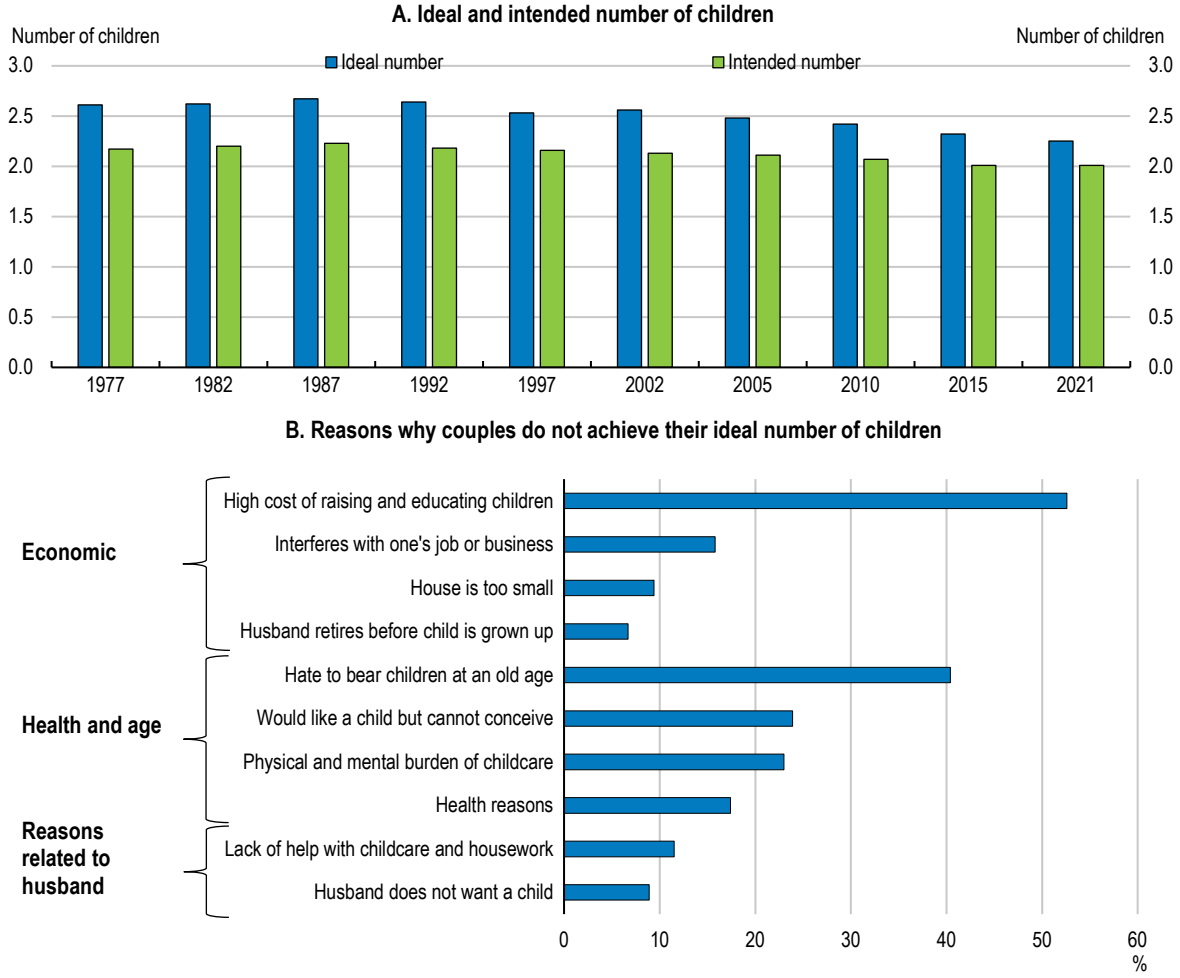
The IPSS survey of married couples taken every five years found that their ideal number of children declined from 2.6 in 2002 to 2.25 in 2021, still well above the replacement rate (Figure 12, Panel A). Moreover, their intended number of children fell only slightly from 2.1 to 2.0 over the same period. Therefore, the challenge is to enable families to have their desired number of children. In 2023, the government announced a package of measures to reverse the fertility decline (Box 2).

A wide range of factors influence fertility. First, the financial insecurity of young people forces a growing number to delay or abandon marriage. Second, economic factors, such as the high cost of raising and educating children and the lack of housing space, were cited as key obstacles in the IPSS survey (Figure 12, Panel B). Third, the negative impact of children on careers and businesses was cited by 16% of women in the survey. The 1992 survey found that half of women agreed that husbands should be the primary breadwinners and women should take care of the home. By 2021, that figure had fallen to 12% (IPSS, 2022). Women's expanding role in the labour market makes it increasingly important to enhance the compatibility between employment and family obligations. Fourth, the IPSS survey also cites several issues related to health and infertility, which are linked to the trend toward delayed marriage, reflecting in part the financial insecurity of young people that delays family formation.

Strengthening the financial situation of young people

Given that 98% of births are to married couples, policies that remove obstacles to marriage, particularly at a younger age, would boost the fertility rate. In the 2021 IPSS survey of single persons between the ages of 18 and 34, 84% of women and 81% of men said that they planned to get married eventually, and their desired number of children was 1.8 on average (IPSS, 2022). In a 2019 government survey that asked single young people, "What conditions are needed for you to consider marriage?", the most common response, at 42%, was "being financially comfortable". Another 10% cited the challenge of finding suitable housing (Cabinet Office, 2019). Addressing the financial obstacles resulting from low and unstable incomes despite long working hours would boost fertility. The first basic principle of children and child-rearing policy announced in March 2023 is to "increase the income of the young generation" (Cabinet Secretariat, 2023a).

Figure 12. A number of factors result in a gap between the actual and ideal number of children



Note: Panel B shows a survey of married women under 50 and whose intended number of children is less than their ideal number. As multiple answers were permitted, the total exceeds 100%. In addition, 8.2% responded that they wanted to focus on themselves and 5.0% said the social environment is not suitable for children.
Source: National Institute of Population and Social Science Research (IPSS) (2022).

Box 2. The government's new plan to increase the fertility rate

The government established the Children and Families Agency on 1 April 2023 by combining offices responsible for child-related policy across the government into one organisation. The Basic Act on Children's Policy, which promotes child-related measures, came into effect at the same time. The "Acceleration Plans for Child and Childrearing Support", first announced in June 2023 and updated in the December 2023 as the "Strategy for Children's Future", contains the following measures.

Strengthening financial support for childrearing

- Expand the child allowance: *i)* the income test will be eliminated; *ii)* its coverage will be extended to high school-age children; and *iii)* the allowance will be increased for the third and subsequent children.
- Increase the lump-sum childbirth and nursing allowance from JPY 420 000 to 500 000 (USD 3 846). Strengthening support for childbirth, including extending the public medical insurance to cover the cost of childbirth, will be considered.

- Eliminate the reduction in subsidies for children's medical expenses and provide better healthcare for children.
- Expand scholarships and tuition reduction to middle-income households with multiple children and/or students studying science, engineering or agriculture and introduce "after-graduation payment of tuition fees", beginning initially at the master's degree level.
- Raise housing support for families with children and boost the capacity of child-friendly housing.

Expanding support for households with children

- Expand seamless support during pregnancy and after birth.
- Improve the quality of childcare, in part by changing the ratio of caregivers to children (for one-year-olds, the standard is changed from six children per childcare worker to five).
- Establish a "system for all children to go to nursery school or kindergarten" (tentative name).
- Meet diverse needs, including children with disabilities, those who are receiving medical care and children who require specialised support.

Promoting dual income households and co-parenting

- Consider boosting the FY2025 target for the share of private-sector male employees taking parental leave from 30% to 50% (85% for civil servants) and setting an 85% overall target for FY2030.
- Consider raising parental leave benefits to 100% of take-home for 28 days to encourage both parents to take parental leave.
- Significantly strengthen subsidies for SMEs that develop systems to support parental leave.
- Consider creating a system allowing a flexible work schedule for parents with children from age three until they enter primary school.
- Establish benefits for parents who work fewer hours while their children are under age two.
- Exempt self-employed and freelancers from paying National Pension contributions during childcare.

Raising awareness to create a society that is friendly to children and child-rearing

- Expand the "Children's Fast Track" at national facilities and other public and private facilities, taking into account the needs of users.

The government released the "General Principles for Child-related Measures" in December 2023, in accordance with the Basic Act and reflecting the opinions of children, those raising children and persons with relevant expertise.

Source: Government of Japan (2023a; 2023b and 2023c); Children's Future Strategy Council (2023).

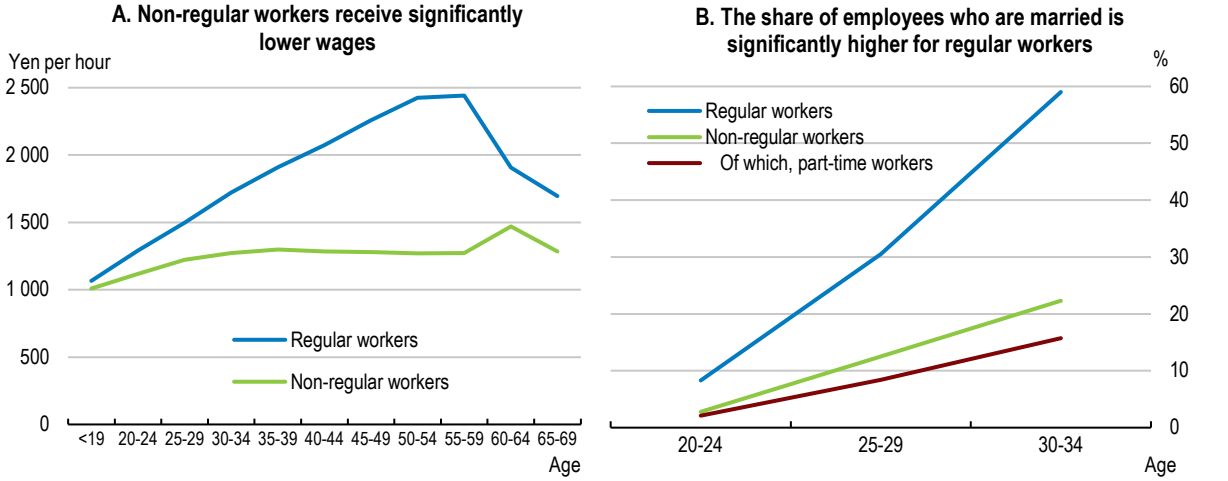
Stronger economic growth would improve the financial position of young people and thus reduce obstacles to marriage and children. In addition, a number of policies would help in this regard:

- *First*, the seniority-based wage system tends to pay young workers less than their productivity while paying older workers more. Reducing the importance of seniority in wage-setting would increase the income of young people and increasing the weight of performance and job category in wage-setting would enable Japan to better utilise its human capital and raise productivity (see below).
- *Second*, the share of non-regular workers among the 15-24 age cohort has risen from around 20% in 1985 to 50% by 2022. For the 25-34 age group, it rose from 3% to 14% for men and from 25% to 31% for women over the same period. In addition to their precarious nature, non-regular jobs

pay significantly lower wages than regular ones (Figure 13). The earnings gap is even wider as most non-regular workers do not receive bonus payments, which account for about 20% of annual wages, and separation payments. Given their higher incomes, regular workers in the 25-29 and 30-34 age groups are 2½ times more likely to be married than non-regular workers (Panel B). Policies to break down labour market dualism would also promote female employment (see below).

- *Third*, wealth inequality has risen significantly among young age cohorts; the share of households in the 25-35 age group with zero wealth increased from 5% in 1984 to 9% in 2014 and the Gini coefficient for wealth in that age group rose from 0.51 to 0.61 (Kitao and Yamada, 2019). Broadening the base and scaling back deductions of the inheritance tax would help reduce inequality, as recommended in the 2019 *OECD Economic Survey of Japan*. Only 8% of deceased persons in 2017 were subject to the inheritance tax. Using the additional revenue to help low-income youth would reduce obstacles to marriage and children.
- *Fourth*, it is crucial to address the issue of *hikikomori*, who are defined as individuals who refuse to leave their parents' house, do not work or go to school and isolate themselves for more than six months, according to the guidelines for the evaluation and support of *hikikomori*. A 2016 Cabinet Office survey estimated that more than half a million persons between the ages of 15 and 39 (1.6% of the total) were *hikikomori (*Tajan et al., 2017). The problem of shut-ins has been exacerbated by COVID-19. A 2023 Cabinet Office report estimated that around 2% of persons aged 15 to 39 were *hikikomori* (Cabinet Office, 2023). More use of teleworking and flexible working styles would help integrate *hikikomori* into society.

Figure 13. The low wages of non-regular workers increase the share who are single



Note: Panel A shows scheduled cash earnings divided by the actual number of scheduled hours worked in 2018. Earnings exclude overtime and bonus payments.
Source: Jones (2022); Cabinet Secretariat (2023b).

Supporting families and children

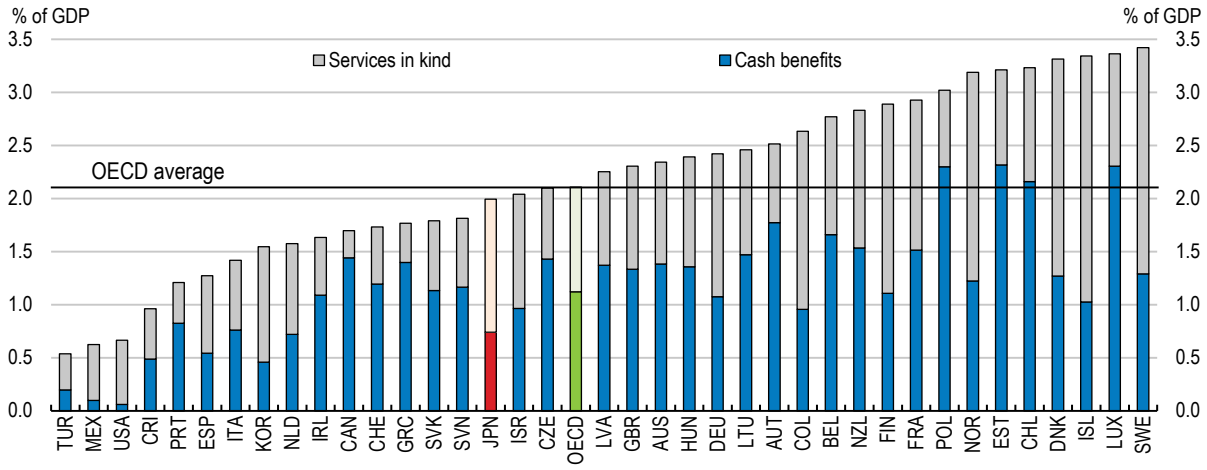
In a 2019 government poll, only 30% of adults agreed that Japan is moving toward a society that is friendly toward marriage, pregnancy, children and childbearing (Cabinet Office, 2019). Family policies can partially offset the cost of children, forgone earnings and career advancement, skill depreciation and the non-pecuniary burden of parenthood. Government spending on family support rose from 0.5% of GDP in 2000 to 2% in 2020, but remains slightly below the 2.1% OECD average (Figure 14). Some of the countries with the highest family support spending, such as France (Box 3) and Iceland, have been able to sustain high fertility rates (OECD, 2023a). In an international survey in 2020, only 38% of Japanese agreed that it was easy to raise children, compared to 77% in Germany, 82% in France and 97% in Sweden (Cabinet Office, 2021). The government is planning a large increase in spending on children and families.

Early childhood education and care and care for elderly relatives

Public expenditure on early childhood education and care (ECEC) has a stronger upward effect on fertility rates than child allowances, as it makes career and family commitments more compatible (OECD, 2023b). In Japan, government spending on in-kind support for early childhood education and care rose from 0.3% of GDP in 2000 to 0.8% in 2019 (Table 2), matching the OECD average. The expanded capacity boosted the share of children below age three enrolled in institution-based childcare from 16% in the early 2000s to 41% in 2019. The expansion of early childhood education and care has been linked to a small but significant rise in fertility in regions where women are most likely to participate in the labour market, with the strongest effect on first births, during the decade 2000-10. However, it had no effect in other regions (Fukai, 2017) and has not succeeded thus far in reversing the nationwide decline in the fertility rate.

Figure 14. Public expenditure on family support in Japan is relatively low

2020 or latest year



Note: The figure does not include tax breaks for families, which amounted to 0.3% of GDP in Japan in 2019, close to the 0.2% of GDP average.
Source: OECD, Family Database.

Table 2. Public spending on family policies in Japan has risen considerably since 2000

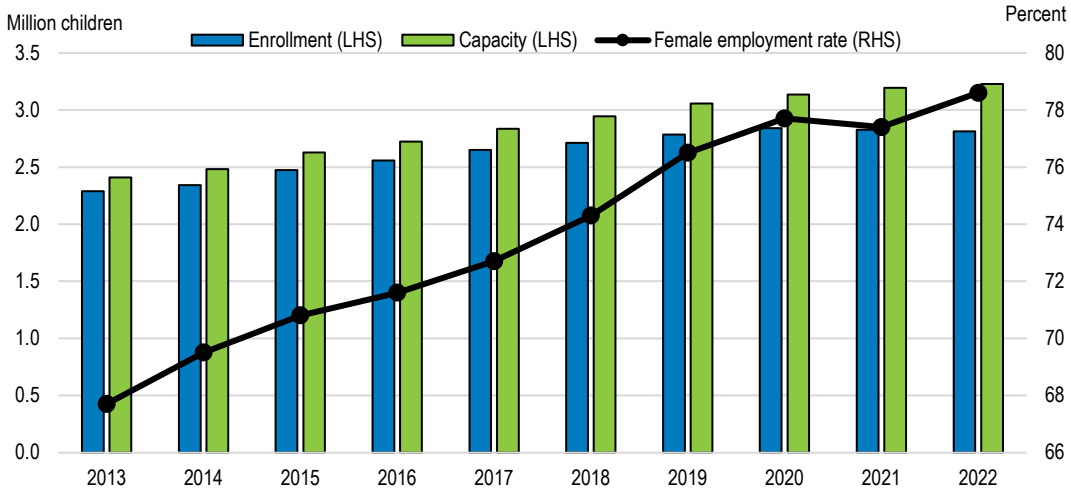
As a percentage of GDP

	2000	2019
Cash benefits	0.2	0.7
Family allowances	0.1	0.5
Child allowance	0.1	0.4
Social allowance	0.1	0.1
Maternity and parental leave	0.0	0.2
Benefits in kind	0.4	1.1
Early childhood education and care	0.3	0.8
Home help/accommodation	0.0	0.1
Other benefits	0.1	0.1
Total	**0.5**	**1.7**

Note: In addition, Japan's tax benefits to families with children amounted to 0.3% of GDP in 2019, close to the OECD average.
Source: OECD, Social Expenditure Database.

Childcare capacity increased by 0.79 million over FY2013-21, boosting total capacity by about one-third to 3.2 million (Box 1). Enrolment rose nearly a quarter over that period (Figure 15) despite the falling number of children. The expansion of childcare facilitated an increase in the employment rate for women aged 25 to 44 from 68% in 2013 to 79% in 2022, in a context of significant labour shortages. With the sharp expansion in childcare facilities, enrolment fell from 95% of capacity in FY2013 to 91% in FY2017 and 87% in FY2021. The number of children under the age of one in childcare declined by 4% in FY2021, reflecting the impact of the COVID-19 pandemic. The waiting list for childcare dropped from 22 700 in FY2013 to 2 900 in FY2022. The oversupply of childcare on a nationwide basis is likely to increase in the future (Nihon Keizai Shimbun, 2021).

Figure 15. Childcare enrolment and capacity and female employment have risen



Note: Enrolment is for children age 0 to 5. The female employment rate is for the 25 to 44 age group.
Source: Ministry of Health, Labour and Welfare.

While there is excess capacity overall, 14% of Japan's 1 741 municipalities have waiting lists for childcare. Even though the waiting lists have less than 100 children in all but three cities, this indicates a mismatch of supply and demand. Approximately 60% of the children on waiting lists were in urban areas (Nippon.com, 2022). Given that the 0.79 million increase in childcare capacity over FY2013-21 only reduced the waiting list by around 20 000, there appears to be considerable latent demand for childcare. Moreover, the plan to allow mothers not in the labour force to use public childcare facilities to reduce loneliness for stay-at-home mothers (Box 2) may boost demand. The government plans to expand capacity further by 140 000 by FY2024. Targeting additional capacity on areas with existing or expected shortages is crucial. In addition, Japan faces a shortage of caregivers. The government plans to raise the number of childcare personnel by 25 000 by improving working conditions, supporting the acquisition of credentials by prospective workers, retaining a higher share of workers and recruiting retired childcare personnel. Boosting wages ought to be a key part of this initiative.

The provision of free early childhood education and care for children aged three to five in 2019 further boosted government spending on children and reduced financial burdens on parents. It had little impact, though, on enrolment, which was already over 90% for that age group. According to a 2022 government survey, about one-fifth of parents raised their ideal and intended number of children due to free early childhood education and care for the three-to-five-age group (Fukuda et al., 2022). However, the experience of Korea, which introduced free early childhood education and care in 2012, suggests that such policies alone are not sufficient to boost fertility or even prevent a decline.

Although Japan introduced long-term care insurance in 2000, families still play a key role in providing care to elderly relatives. In 2016, three-quarters of workers who left their jobs to provide long-term care were women, and 74% of them were between the ages of 30 and 60 (OECD, 2018a). A study found that

employed women who began providing five or more hours of long-term care per week were significantly more likely to leave their jobs than women providing less care (Kikuzawa and Umemura, 2020). Rapid population ageing and the increased emphasis on home-based care for the elderly may make long-term care a more serious obstacle to female employment.

Box 3. Public support for children and families in France

France stands out among OECD countries because of its relatively high and stable total fertility rate, which reflects its family policies. After a steep drop at the beginning of the 1960s, France's fertility rate stabilised in the mid-1970s and has since remained steady at 1.8-2.0 children per woman. At 1.8 in 2020, France had the third-highest fertility rate in the OECD area. A large proportion of women have two or three children and few remain childless. France's elderly dependency ratio is projected to be close to the OECD average at around 50% in 2050 (Figure 2).

France's extensive and long-standing consistent family policies contribute to the high and stable fertility rate. In 2019, France's public spending on families, including tax breaks for families, was the highest in the OECD at 3.4% of GDP, well above the OECD average of 2.3% and Japan's 1.9%. A relatively large share of spending takes the form of tax breaks, which tend to favour high-income households. Lower-income families receive significant financial support through social assistance, housing subsidies and other means-tested benefits.

Outlays on families amounted to 2.7% of GDP, compared to 2% in Japan in 2020 (Figure 14), and finance parental leave, childcare services and a family allowance. Childcare services focused on preschool education (*école maternelle*), which is free for all children aged three to six. A working parent who meets the eligibility conditions is entitled to parental leave for up to three years and can return to the same or a similar position with the same employer. Parents receive a payment during leave that is close to half of the minimum wage. All families with two or more children receive a family allowance. Cash allowances to families have fallen from 2.0% of GDP in 1980 to 1.3% in 2019, but remain close to the OECD average.

France has provided a diversified system of supplementary resources in the form of money and services needed to raise children. While it is difficult to calculate the impact of specific policies, the provision of childcare services appears to be the most effective in encouraging families to have children and women to remain in the workforce. France's success reflects the stability of family policies based on strong popular support. This stability gives confidence to families that they will benefit from continuous support from the birth of a child until entry into the school system and beyond. Such confidence creates a favourable environment for having children.

Source: Thévenon (2016).

While an enhanced role for home-based care is essential to contain the soaring cost of long-term care and improve the well-being of the elderly, it is important to avoid discouraging female employment. The government's 2016 "Plan for Dynamic Engagement of All Citizens" set an objective that "No one will be forced to leave their jobs to provide nursing care". However, only 3.2% of workers with long-term care responsibilities in 2017 took advantage of the provisions in the Child Care and Family Care Leave Act (Ikeda, 2017). The revision of the Act in 2017 allows workers to take long-term care leave three times for up to 93 days in total and exempts them from overtime work. It is important to increase awareness of long-term care leave entitlements among companies and workers and to provide incentives to promote its use. A key problem is the shortage of long-term caregivers in Japan, suggesting the need for more foreign caregivers. In July 2023, a Ministry of Health, Labour and Welfare panel launched discussions on whether to allow foreign workers to make home visits to provide long-term care for the elderly.

Parental leave

Public expenditure on parental leave also has a positive association with total fertility rates in OECD countries (OECD, 2023b). In Japan, both men and women have the right to parental leave, which can be taken consecutively or in tandem until the day before the child's first birthday. Parental leave of up to 12 months for fathers in Japan is the longest among OECD countries and well above the OECD average of about ten weeks. However, fathers' take-up of parental leave is relatively low, despite increasing from 7% in 2019 to 17% in 2022, compared to 80% for mothers,(Figure 16 Panel A). In contrast, fathers' share is as high as 40% or more in some Nordic countries and Portugal. More than half of Japanese men using parental leave in 2021 took less than two weeks (Panel B). In contrast, nearly 80% of mothers take at least ten months of leave. OECD research shows that fathers who take parental leave are more likely to be actively engaged in childcare and tend to stay more involved with their children, which is beneficial for fathers, mothers and children (OECD, 2016a). In Nordic countries, flexibility in taking parental leave and generous benefits promote high take-up (Box 4).

Box 4. Parental leave policies in Sweden and Norway

In 1974, Sweden was the first country to introduce paid parental leave for both mothers and fathers. The total length is now 480 days. However, each parent is limited to 390 days, resulting in 90 days of exclusive leave that their partner cannot use. The introduction of parental leave reserved for fathers has induced a majority of fathers to take parental leave. Indeed, fathers currently account for about one-third of parental leave days taken in Sweden. Despite the exceptionally long length, each parent can receive up to 80% of their previous earnings for 390 days of parental leave, followed by a flat rate. Parents can take parental leave until their child is 18 months old.

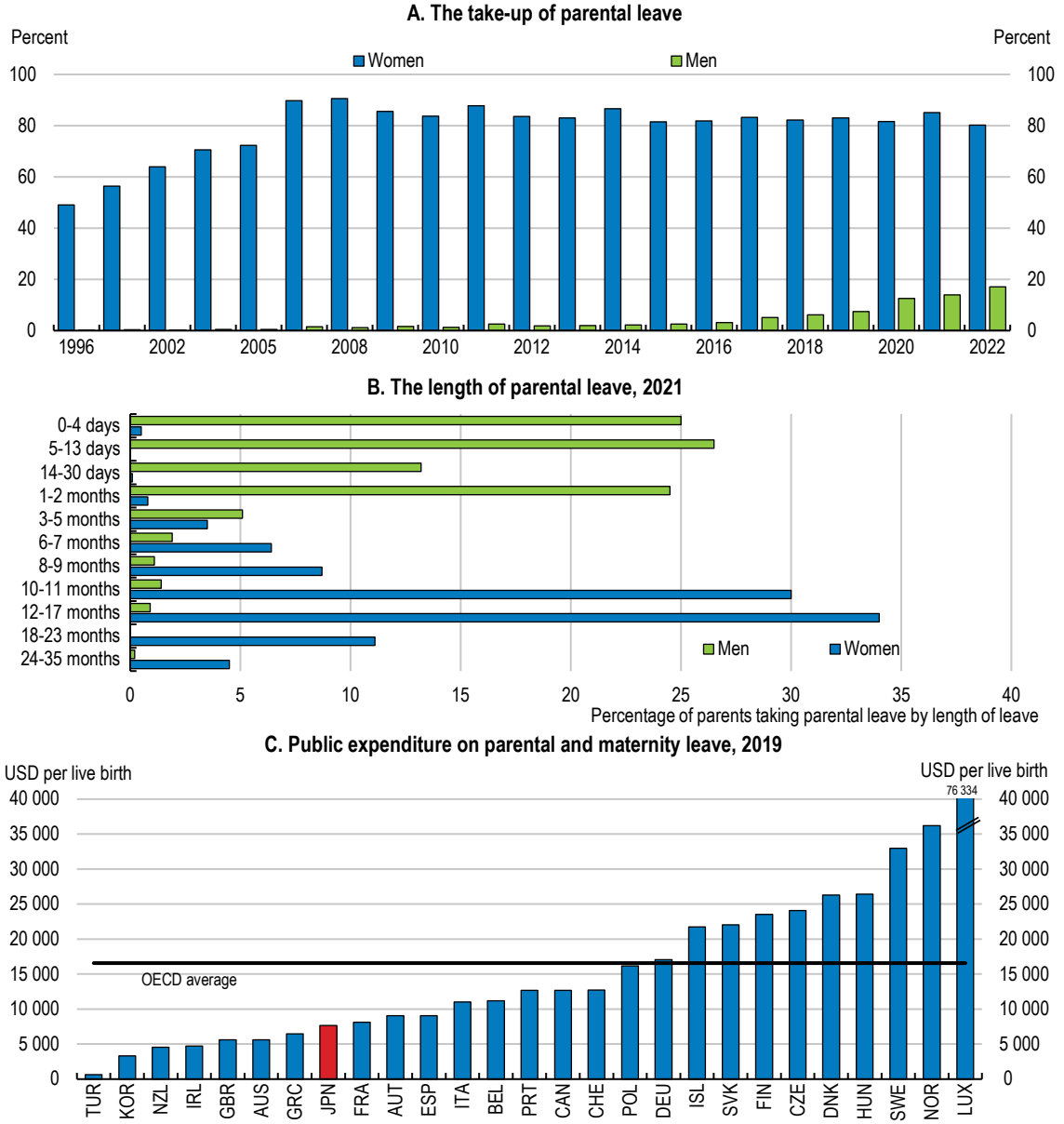
The Norwegian parental leave system also has exclusive leave entitlements for fathers (15 weeks) and mothers (18 weeks, including three weeks before birth). In addition, parents are entitled to a fully sharable period of 16 weeks, making a total of 49 weeks of parental leave. While the maximum parental leave for fathers, at 31 weeks, is shorter than the one year allowed in Japan, men took 38% of all parental leave days taken in 2022 in Norway, which is more than men in other OECD countries. However, while 90% of men take parental leave, 70% stop once the leave reserved for fathers is exhausted. The parental leave system provides flexibility; parents can combine part-time leave with part-time employment after the first six weeks. Benefits are exceptionally generous, providing 100% of previous earnings up to a ceiling close to Norway's average gross monthly earnings. Parental leave can be lengthened to 59 weeks if benefits are limited to 80% of previous earnings. Parental leave entitlement can be taken up to a child's third birthday (OECD, 2023a).

According to the OECD Family Database, the average payment rate for parental leave reserved for fathers in Norway and Sweden was 100% and 76%, respectively, of previous earnings in 2022, compared to 61% in Japan. While the parental leave reserved for fathers in the two Nordic countries is shorter than the 52 weeks in Japan, the higher payment rate encourages more fathers to take parental leave. The higher benefits and higher take-up in Norway and Sweden lead to significantly greater spending. Indeed, their spending on maternity and parental leave in 2019 was about 4.5 times higher (in USD terms) per live birth than in Japan (Figure 16, Panel C).

An important obstacle to parental leave in Japan is the financial and professional sacrifice it entails. In a 2020 government survey, 41.4% of the men did not take parental leave because they did not want to lose income (Cabinet Secretariat, 2023b). Fathers receive 67% of their earnings for the first 180 days and up to 50% for the remainder up to certain ceilings. The "average payment rate" (the proportion of previous earnings replaced by the benefit over the length of the paid leave entitlement for a person earning the average full-time earnings) was 61% in Japan in 2022. Another 27.3% of the men who did not take leave blamed their employers for making it difficult. Another common concern is the risk of negative career

repercussions, given that traditional Japanese corporate culture discourages absences. Although discrimination against parental-leave takers is forbidden, 14.6% of men feared a negative effect on promotions and salaries, as they may be ostracised for not being a team player, and 7.2% were concerned about losing their job. Moreover, many companies do not inform their employees of their right to take parental leave nor encourage them to use it. In the survey, 21.3% said their employer did not have a system to accommodate parental leave. Consequently, taking leave would impose heavy burdens on their colleagues, as firms may not hire replacements. Around 22% said they had assignments that only they could complete and 21% cited the heavy workload as a reason for not taking leave. Public expenditure on maternity and parental leaves per live birth in Japan was below the OECD average in 2019 (Figure 16, Panel C).

Figure 16. The take-up of parental leave by men is low and the duration is short



Note: Panel C shows public expenditure on maternity and parental leaves per live birth in 2019, in equivalent USD converted using 2015 purchasing power parities.
Source: Ministry of Health, Labour and Welfare; and OECD, Family Database.

The government launched *Sango-Papa-Ikukyu* in October 2022. It provides four weeks of paternity leave for fathers during the first eight weeks following the birth, with the benefit set at 80% of wages. In addition, companies are required to inform employees about their right to parental leave and have supervisors ask employees about their intentions. While this may boost the share of fathers taking leave, it is unlikely to lengthen its short duration.

In June 2023, the government indicated that it is considering an increase in the FY2025 target for the take-up of parental leave by men to 50% and setting an overall objective of 85% by FY2030. It proposed several initiatives to achieve these targets (Box 2): *i)* providing benefits equal to 100% of take-home pay for 28 days if both parents take leave; and *ii)* granting subsidies to ease the financial burden of parental leave on SMEs, which are most vulnerable to labour shortages. Moreover, SMEs have more non-regular workers (fixed-term, part-time and atypical). Large firms have taken the lead in providing parental leave for their employees. A survey of firms found that the share of eligible male workers taking parental leave in FY2020 exceeded 30% in 42 of Japan's leading firms, and topped 70% in 20 of them (Asahi Shimbun, 2022). Increasing the benefits paid to parents who take parental leave would help overcome men's concerns about extended work absences. The cost of higher benefits and longer leaves requires hiking the contribution rates paid to the Employment Insurance Fund, which finances the leave.

Child allowances

Spending on child allowances increased from 0.1% of GDP in 2000 to 0.4% in 2019 (Table 2). The government's June 2023 plan (Box 2) calls for expanding the allowance by eliminating mean testing and raising the eligibility age to 18. In addition, the Tokyo metropolitan government plans to introduce a monthly allowance of JPY 5 000 for every child up to age 18 in 2024, regardless of household income.

The central government's plan to expand the child allowance could cost JPY 2-3 trillion, which is about half of the budget for child-related policies in FY2023. Cash transfers to families with children, such as family or child allowances, lower the cost of having children, which tends to raise fertility rates. However, their impact on fertility is negligible in Japan, with an elasticity of only 0.1-0.2, which is consistent with estimates from other countries, including Canada, Germany, Israel and Spain (Yamaguchi, 2021). Moreover, any impact is only transitory (Bergsvik et al., 2021). In practice, parents tend to spend the transfers on their existing children, rather than having more children. In addition, generous transfers may push women out of the labour market (Bargu and Morgandi, 2018). Public spending on childcare is five times more effective than child allowances in raising fertility in Japan (Yamaguchi, 2021). In addition, tax exemptions for children do not significantly affect fertility (Bergsvik et al., 2021).

While the impact on fertility tends to be small and only temporary, targeted child allowances can reduce child poverty. In 2018, Japan's relative poverty rate (an income below half of the national median) for children aged 17 and under was 14%, slightly above the OECD average. The rate for children in single-parent households is the highest in the OECD at 48%, even though the government provides allowances for single parents. Carefully targeted child allowances in Japan would help reduce poverty and improve the prospects for children from disadvantaged backgrounds.

Reducing the financial cost of children

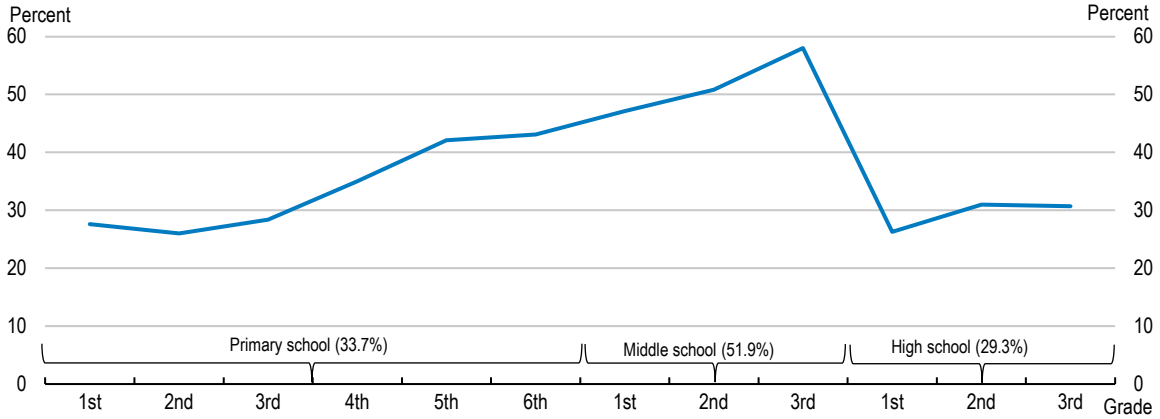
More than half of the parents cited the cost of raising and educating children as a reason for not achieving their desired number of children (Figure 12, Panel B). The share was highest for those who wished to have three or more children (IPSS, 2022). In a 2020 survey, 66% of parents agreed that "people's academic ability and record depend on how much is spent on their education". Moreover, around two-thirds of parents agreed that educational spending on their children was a heavy burden and planned to spend more on their children's education than for retirement (Sony Life Insurance, 2020). In its June 2023 plan, the government said that people should not abandon having children for financial reasons. It proposed lowering the cost of higher education by increasing scholarships and tuition reduction to middle-income

households at the bachelor's degree level and introducing "after-graduation payment of tuition fees" in which graduates pay back no-interest loans only after graduation (Box 2).

A more immediate concern for families with school-age children is the cost of after-school lessons in private institutions known as *juku*. Intense competition to enter prestigious schools and universities through high-stake exams has led to an essential role for *juku*. Indeed, entrance exams determine to a significant degree students' future educational, economic and social opportunities. There are an estimated 50 000 *juku* in Japan. In 2018, one-third of primary school students and one-half of middle school students attended *juku*, focusing on entrance exam preparation and supplementary courses centred on Japanese, English, math and science (Figure 17). Competition to enter private schools drives much of the after-school education. Indeed, in Tokyo, a quarter of middle school students attend private schools. In addition to *juku*, another one-fifth of students participate in home tutoring or distance learning.

Figure 17. Enrolment in after-school tutoring institutions (*juku*) is common

In 2017



Source: Kimura (2018).

Average household spending on *juku* in FY2021 reached a record high. At the middle-school level, it averaged JPY 175 435 (USD 1 349) for children in private middle schools and JPY 250 196 (USD 1 925) for those in public institutions (MEXT, 2022b). Per student, this amounts to 4.6% to 6.5% of the average annual wage in FY2021, a significant burden, particularly for families with multiple children. *Juku* attendance is highest in Tokyo and other major urban areas (Kimura, 2018), where fertility rates are lowest. Reducing the role of *juku* would lower the financial cost of children while improving equity in educational outcomes. One priority is to increase the quality of school education, given that *juku* are succeeding in ways that schools are not. As recommended in the *2013 OECD Economic Survey of Japan*, reducing the importance of multiple-choice school entrance exams may also help diminish the dependence on *juku*, which prepare students for such exams. Greater weight could be given to other criteria, such as school grades, recommendations and extra-curricular activities at school. At the same time, providing the benefits of *juku* more broadly and at lower cost would be beneficial. For example, schools could offer after-school activities to compete with *juku*, an approach used in Korea. Greater use of internet-based services and the NHK (the public broadcaster) would also be beneficial (Jones, 2022).

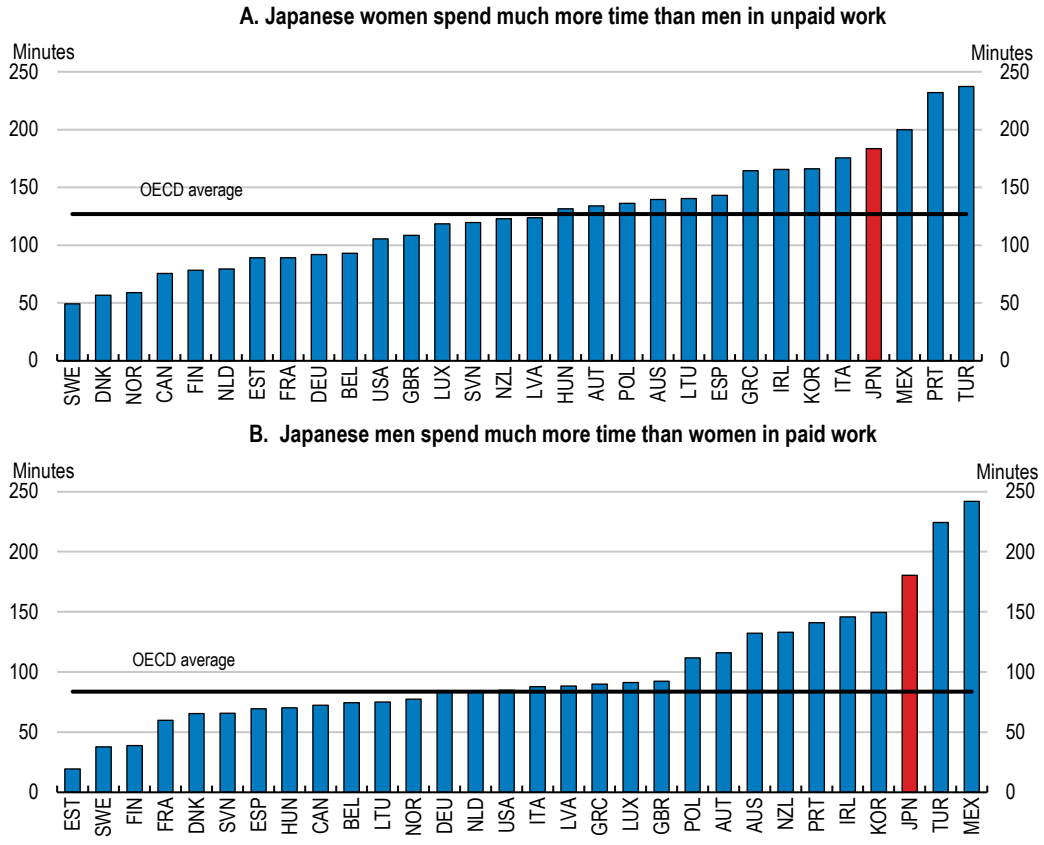
Labour market policies for greater involvement of fathers at home

With increasing female labour force participation, couples have had to rebalance responsibilities for careers and raising children. Successfully finding a balance between careers and childcare that is perceived as fair is critical in determining fertility. Some studies link an unequal division of childcare and housework to disagreements within couples over fertility intentions. Not surprisingly, women tend to want fewer children if they shoulder most of the unpaid work (Doepke et al., 2022). In Japan, a lack of help from

fathers with housework and childcare is also cited as a reason that couples do not have their ideal or intended number of children (Figure 12, Panel B). Men spend an average of 41 minutes a day on "unpaid labour" – childcare, housework, shopping, etc. – less than one-third of the OECD average, while women spend 3¾ hours. Consequently, women devote around three hours per day more to unpaid labour than men (Figure 18). On the other hand, the time that Japanese men spend on paid labour is the second longest among OECD countries, with 27% of men working more than 48 hours per week in 2019. Long work hours, long commutes and after-work socialising limit men's availability for unpaid labour. Moreover, in dual-income households, fathers tend to arrive home later than mothers (Cabinet Secretariat, 2023b). Consequently, the gender gap in paid and unpaid work in Japan is exceptionally large and makes marriage and children unattractive to some women.

The share of unpaid labour performed by men is positively correlated with the total fertility rate across countries, suggesting that increasing men's share of unpaid labour would boost fertility (Doepke et al., 2022). A recent study found that the longer the husband's time spent on housework and childcare, the higher the percentage of wives that continued to work and the higher the rate of births of second and subsequent children (Cabinet Secretariat, 2023b). While the government has little direct impact on the division of labour within households, reducing men's time in paid labour and increasing the share of men who take parental leave and the length of their leave (Figure 16) would facilitate more unpaid labour by men.

Figure 18. The gender imbalance in paid and unpaid work is large



Note: The figure shows the difference between males and females. For persons aged 15 to 64. Unpaid work includes routine housework; childcare, elderly care, shopping, etc. The survey year ranges from 1999 to 2019. Japan's survey was in 2016, the second most recent.
Source: OECD, Employment: Time Spent in Paid and Unpaid Work by Sex.

In addition, further tightening and enforcing limits on working time would be helpful, as recommended in the *2019 OECD Economic Survey of Japan*. The Work Style reform introduced mandatory limits on

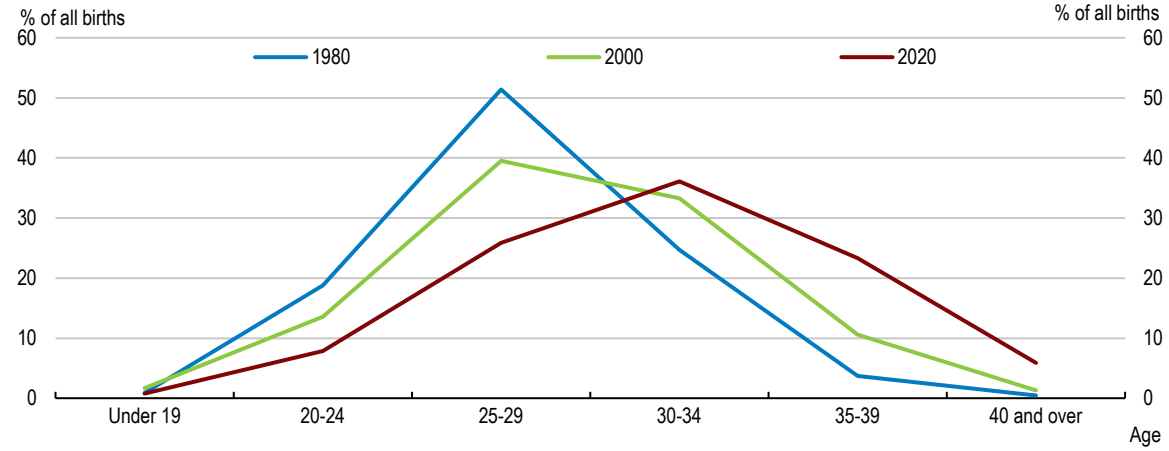
overtime hours in 2019 (2020 for SMEs). Overtime work is limited to 45 hours per month and 360 hours per year. However, employers that have an agreement with their employees can require additional overtime and holiday work under certain conditions. First, it must be less than 100 hours per month and cannot exceed an average of 80 hours per month over a two to six-month time span. Second, overtime hours are allowed to surpass 45 hours per month for up to six months a year, as long as the annual total does not exceed 720 hours. The number of registered agreements on overtime work in 2021 was about 1.89 million. A 2019 law obliges employers to make efforts to introduce rest time between periods of work (interval-time regulation). The European Union, for example, requires an 11-hour interval. The share of Japanese firms with an interval-time rule increased from 1.8% in 2018 to 5.8% in 2022. Among large firms (1 000 or more workers), 14.6% have an interval rule, but less than 6% of firms with between 30 and 299 workers have it (MHLW, 2023a). The government's goal is to have 15% of firms with an interval system by 2025. Among the 80% of firms in 2022 that were not considering such a system, more than half said they did not see the necessity because they rarely require their employees to work overtime.

Increased teleworking would also improve work-life balance, particularly given long commuting times in major cities. Among enterprises with more than 100 regular employees, the share using teleworking jumped from 20% in FY2019 to 51% in FY2021 due to the pandemic. That year, 27% of employees teleworked at least once a week, led by the Tokyo metropolitan area at 42%. Teleworking was more prevalent in large companies at 40% compared to only 14% in those with less than 20 workers. In 2021, the government published a "Guideline to promote the appropriate introduction and implementation of telework". To encourage the use of teleworking, the government provides consulting services and subsidies for SMEs.

Addressing health and fertility issues

The average age of women at the time of their first birth increased from 26.4 years in 1980 to 30.7 in 2020, in line with the rising age of marriage. In 1980, more than 70% of babies were born to mothers under age 30, but by 2020, 65% were born to mothers aged 30 or older (Figure 19). The postponement of births means that some couples cannot have their ideal number of children due to health issues. In the IPSS survey of why couples did not achieve their desired number of children, women cited general health concerns (17%), not wanting to have children later in life (40%), and the physical and psychological burdens of children (23%) (Figure 12, Panel B). Improved work-life balance, including greater use of parental leave by fathers, would help mitigate some of these burdens.

Figure 19. Japanese women are giving birth at an older age



Source: Statistics Bureau of Japan, *Statistical Handbook of Japan 2020*.

In addition, 24% of women said they cannot bear a(nother) child, reflecting the fact that infertility problems rise with age (Figure 12, Panel B). Infertility was the explanation for 62% of the couples who had wished to have at least one child but planned on having no children. The share of couples being tested or treated

for infertility rose from 13% in 2002 to 23% in 2021. For those married between five and nine years, the share was 28% (IPSS, 2022). The government introduced subsidies for in-vitro fertilization (IVF) in 2004 and by 2018, 6% of babies born in Japan were conceived using IVF. Health insurance has covered 70% of the cost of assisted reproductive technology, including IVF, since 2022. While Japan has the highest number of IVF cases, fewer than 10% succeed, one of the lowest rates in the world, and the share is falling. One reason is that around 40% of Japanese women who undergo IVF are in their 40s, twice as many as in the United Kingdom or France (Bioedge, 2018). In addition, rules covering the use of surrogacy and the donation of eggs and sperm are unduly restrictive.

Increasing labour market opportunities for women

Japan ranks 125th among 146 countries in the 2023 Global Gender Gap Report (World Economic Forum, 2023). Although the gap has been nearly closed in some areas, such as education, large disparities remain in the labour market. The female employment rate rose from 60.7% in 2012 to 72.4% in 2022, surpassing the OECD average (Figure 20, Panel A), in the context of serious labour shortages. However, the gender employment gap remains close to the OECD average (Panel B), and the gender wage gap was the fourth largest in the OECD in 2021 (Panel C). OECD simulations suggest that narrowing the gender employment gap for each five-year age cohort by 2050 would boost total employment by 5% in all fertility scenario assumptions (Figure 21).

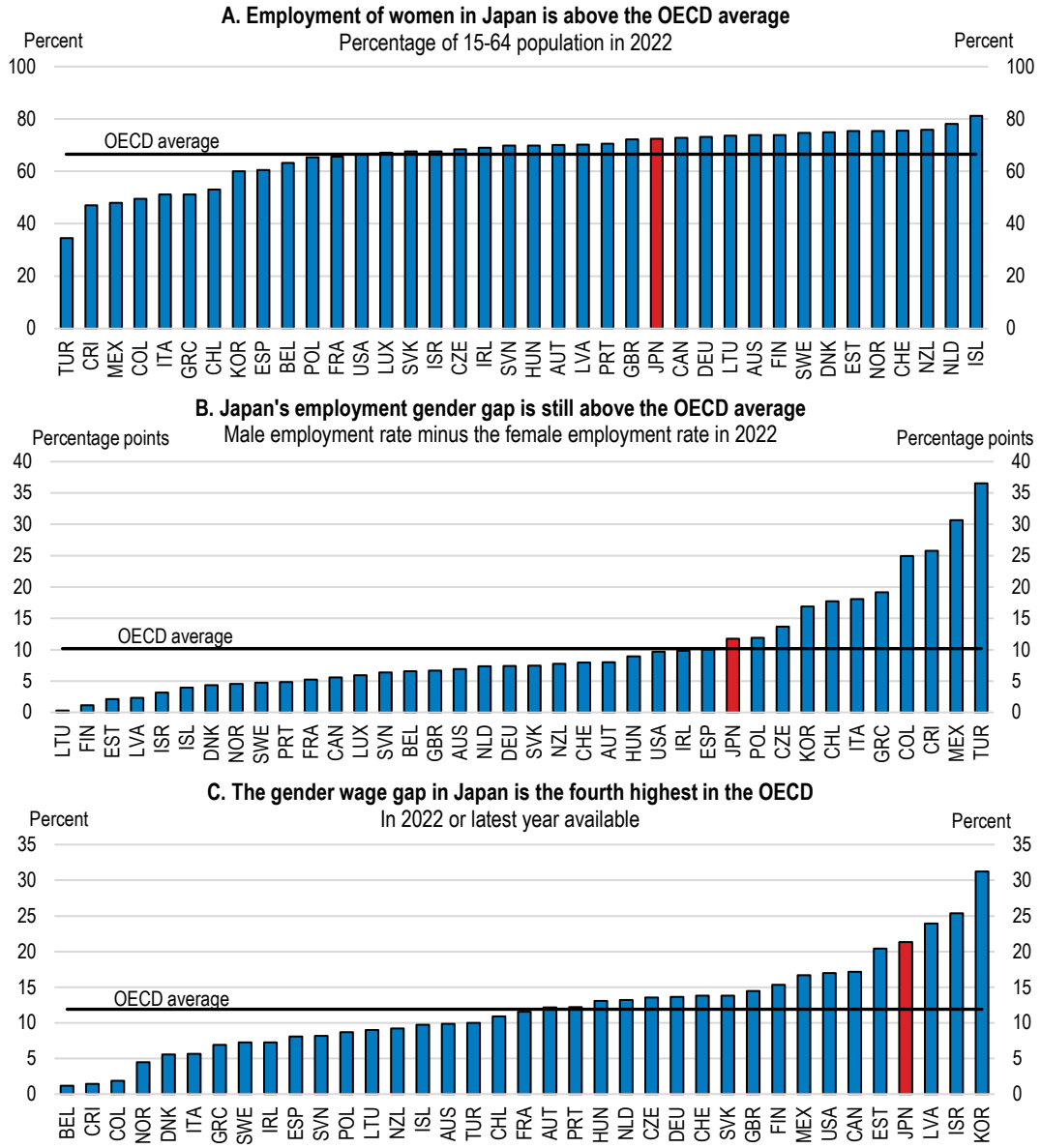
Policies to improve work-life balance and expand early childhood education and care, discussed above as strategies to raise the fertility rate, would also encourage female employment by making it easier to combine employment and family responsibilities. Other factors that hinder the quantity and quality of female employment include: *i)* the segmentation of the labour market between regular and non-regular workers (Figure 22, Panel A); *ii)* fiscal measures that discourage the labour market participation of second earners in households; and *iii)* discrimination against women. The priority is not to have women conform to the traditional Japanese employment system, but rather to change the traditional system to accommodate women and men in ways that promote the well-being of individuals and families.

Overcoming the impact of labour market dualism on women

Japan's dualistic labour market is a crucial factor explaining adverse labour market outcomes for women. The share of female employees who are non-regular workers has risen sharply over the past 30 years to 55%, far above the share for men (Figure 22, Panel B). Consequently, women account for more than two-thirds of non-regular workers, making it a major factor in Japan's large gender wage gap, given the low wages of non-regular workers. It also explains the high share of women employed as part-timers (39%) in 2021, well above the 24% OECD average. In the 25-29 age group, 84% of women are employed and 59% are employed as regular workers (Panel C). From age 30 (the median age of marriage), the share of women employed as regular workers declines steadily and it is surpassed by the share of non-regular workers in the 35-39 age cohort. In the 55-59 age group, only a quarter of women are regular workers.

Women's labour force participation and employment status depend to a large extent on their marital situation. At age 30, 89% of single women were employed, four-fifths in regular jobs (Figure 23, Panel A). In contrast, only 37% of married women were employed and only half were in regular jobs (Panel B), as many women withdraw from the labour force at the time of marriage or childbirth. The share of married women who are employed doubles to 74% by age 47, but non-regular employment accounts for 88% of the rise in employment, reflecting the obstacles to finding regular jobs, even for women who worked as regular workers before marriage and childbirth. A temporary absence to have children can thus have long-term repercussions on women's labour market prospects.

Figure 20. Gender disparities in Japan's labour market remain large

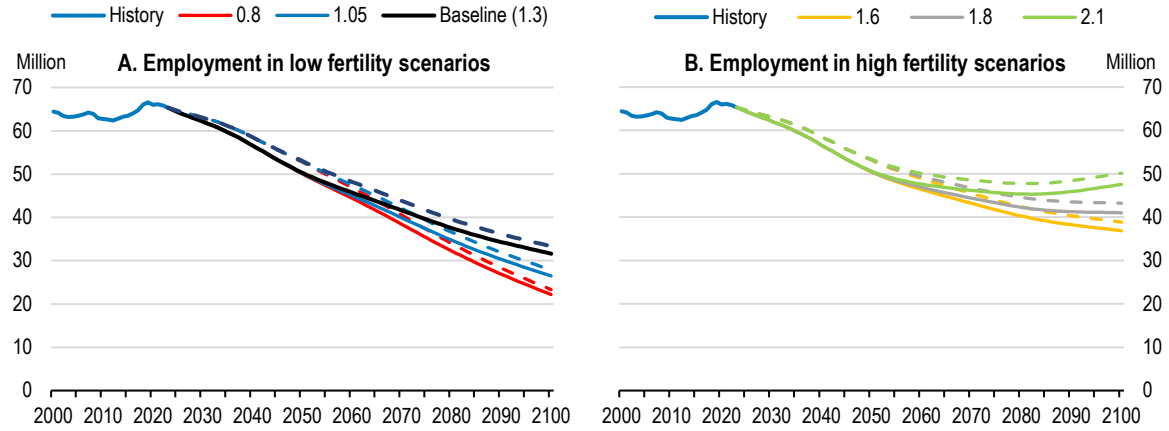


Source: OECD, Labour Force Statistics database.

Wages for non-regular workers do not increase with age and seniority in contrast to regular workers (Figure 24):

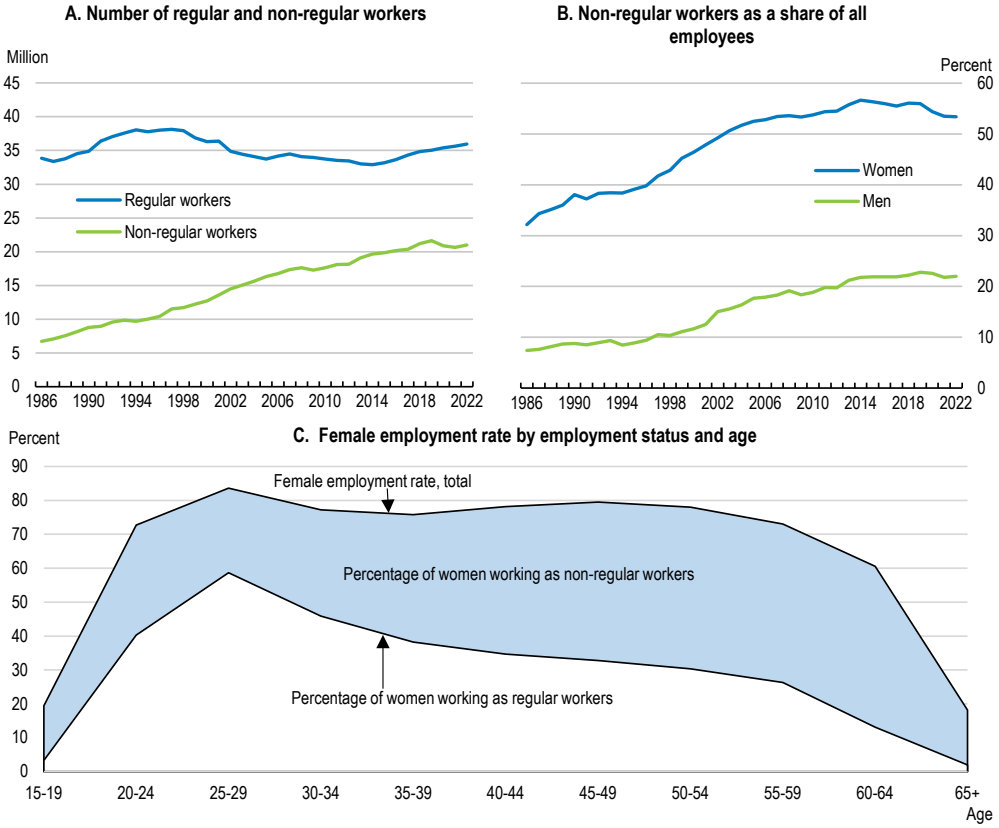
- Among women with at least a college degree, regular workers earn 4.4 times more than non-regular workers by age 50, while for women with only a high school degree, regular workers earn 3.2 times more. Moreover, they earn more than non-regular workers with at least a college degree, indicating that employment status has a larger influence on earnings than education levels.
- The earnings of non-regular female employees with at least a college degree are below those of regular workers with only a high school education for women aged 38 and above, indicating that obtaining more skills offers little reward for non-regular workers.

Figure 21. Labour force projections if female employment rises to the rate for men by 2050



Note: Dotted lines show female employment rate converging to the male rate by 2050 in each fertility scenario.
Source: OECD calculations based on the OECD Long-term Model.

Figure 22. Non-regular employment is concentrated among women



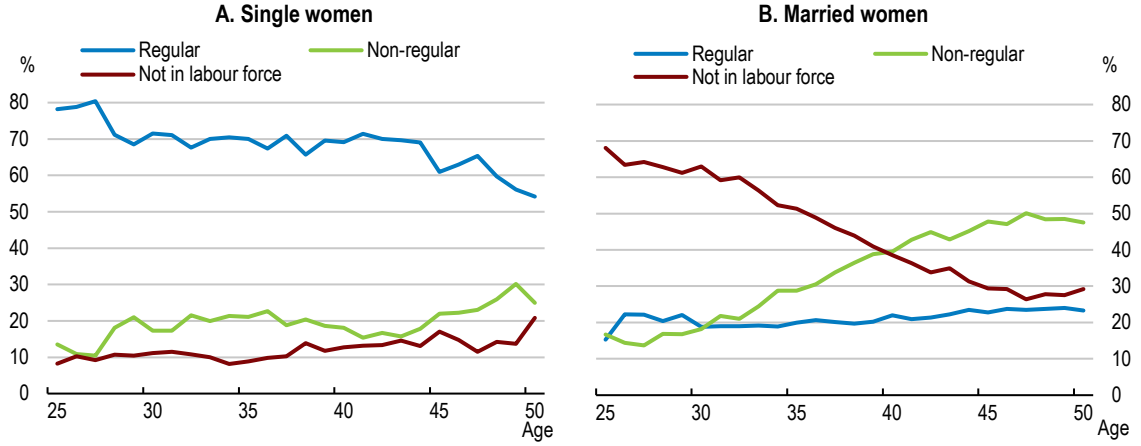
Source: Ministry of Internal Affairs and Communications, *Labour Force Survey, Basic Tabulation*; and Cabinet Secretariat (2023b).

Reducing the share of non-regular employment among women would encourage more women to accept employment, particularly those with higher education who may hesitate to accept low-paid, menial jobs. It would also promote more regular jobs for all workers and encourage more on-the-job training, thereby boosting productivity (Kitao and Mikoshiba, 2020), and reduce wage and income inequality.

Former Prime Minister Abe set a goal that "the term non-regular work will be swept from this country" (Kojima et al., 2017). Breaking down dualism requires addressing the factors that encourage firms to hire non-regular workers. In a 2015 government survey asking firms why they hire non-regular workers, 39%

cited the need to reduce labour costs (Gordon, 2017). In addition, firms pay less in social insurance for non-regular workers given their lower coverage. The other two reasons cited by firms for hiring non-regular workers are the need for a more flexible workforce to adapt to changing workloads (33% of firms) and the need to secure workers quickly (31%). Firms hire non-regular workers to act as shock absorbers – easy-to-hire and easy-to-fire resources that can be adjusted quickly in line with the business cycle – given the job security of regular workers (Yashiro, 2018). The "equal pay for equal work" principle in the 2018 Work Style reform aims to resolve "irrational gaps in working conditions between regular and non-regular workers in the same firm". However, it is difficult for workers to take complaints of unfair treatment to the judicial system, given their limited information and the fact that unions primarily represent regular workers.

Figure 23. The rate of non-regular employment is much higher among married women



Note: See the note to Figure 2.24 for the source of the data.
Source: Kitao and Mikoshiba (2022).

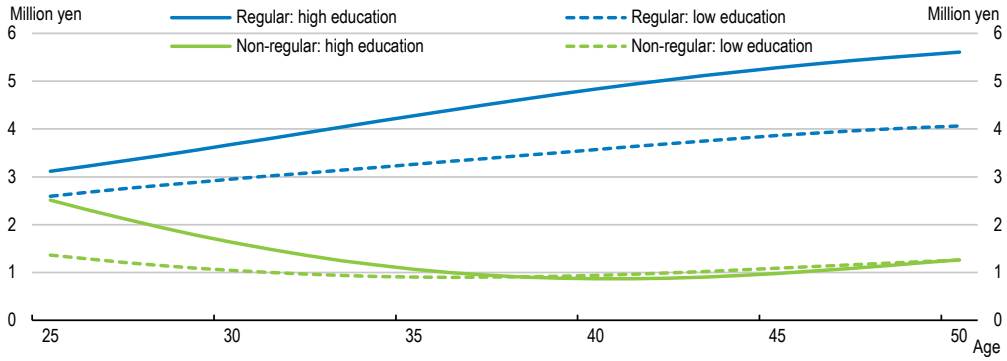
The lack of employment flexibility stems from the employment protection accorded to regular workers. Japan's Labour Contract Act states that any dismissal of workers that "lacks objective, reasonable grounds and is not considered to be appropriate in general societal terms, [shall] be treated as an abuse of power and be invalid." This formulation allows the legal system considerable discretion. Judicial precedents have established four criteria to determine whether employment adjustment in corporate downsizings is an abuse of power by the company (OECD, 2019a):

- The employer must establish the economic need to decrease its workforce.
- The employer must demonstrate that it made all reasonable efforts to avoid dismissals, such as reducing overtime hours, offering voluntary retirement and seconding staff to affiliates.
- The employer must establish objective and reasonable criteria for selecting which workers are dismissed.
- The employer must demonstrate that the dismissal procedure is acceptable, for example, by showing that unions or worker representatives were consulted.

It is thus "exceedingly difficult to judge the validity of dismissal", as these criteria leave considerable room for interpretation (JETRO, 2016). If a firm is judged to fall short of any of the criteria, the dismissal may be invalidated. Courts typically order the reinstatement of dismissed workers with back pay. In sum, employers face great uncertainty in dismissing regular workers, thus prompting them to turn to non-regular workers for flexibility (OECD, 2019a).

Figure 24. Earnings of non-regular workers are low compared to regular workers

For women born between 1959 and 1969



Note: Data for Figures 2.23, 2.24 and 2.25 are from the Japan Panel Survey of Consumers (JPSC), the longest-running nationwide panel survey of individuals in Japan. The figure above uses the cohort of women born between 1959 and 1969, for which there are 19 500 yearly observations. The JPSC collects comprehensive information about the labour market experience of women, including earnings, educational and employment status. High education refers to women with a college degree and above. Low education refers to women with less than a college degree.
Source: Kitao and Mikoshiba (2022).

Reducing labour market dualism could play a key role in strengthening the position of women and younger people to support families. As recommended in the *2019 OECD Economic Survey of Japan*, a comprehensive strategy is necessary to break down labour market dualism by improving social insurance coverage and training programmes for non-regular workers and reducing employment protection for regular workers, in part by increasing its transparency. Uncertainty could be reduced by requiring firms to pay a specific monetary compensation for dismissed workers, leading to a more foreseeable dispute settlement system. It would also contribute to the removal of mandatory retirement set by firms (see below). Some European countries have reduced employment protection through grandfathering – allowing workers to keep existing protection, but not granting it to new hires (OECD, 2019a). In sum, the objective should be to shift from protecting jobs to protecting workers, the so-called "flexicurity" epitomised by Denmark. This requires providing adequate income and re-employment support to displaced workers.

Addressing social insurance and tax arrangements that hold back female employment

Empirical evidence demonstrates that second earners are relatively responsive to work incentives. Tax and benefit systems that weaken such incentives can impact employment, gender equity, income inequality and efficiency. Removing disincentives for second earners can positively affect employment and GDP (Thomas and O'Reilly, 2016). Measures aimed at protecting married women have negatively affected female labour force participation (Kitao and Mikoshiba, 2022). In 1961, Japan introduced tax deductions for the main earner if the second earner had an income below a certain threshold. Until 2018, the earnings threshold for the second earner for the spousal tax deduction was set at JPY 1.03 million (USD 7 923), the same level at which labour income is subject to income tax. The (special) spousal deduction allows the main earner to deduct JPY 380 000 (USD 2 923) from their taxable income. The deduction phased out gradually as second-earner income increased, reaching zero at JPY 1.41 million (USD 10 845). In addition, it is common for firms to provide spousal allowances for their workers, if the spouse earns below a certain limit. Around half of firms set the allowance at the same JPY 1.03 million threshold. Empirical studies show that the spousal deduction encourages women to limit their earnings to that threshold (Yokoyama, 2018). Most of the spousal deductions for the main earner went to high-income households, while less than one-fifth of those with earnings below the average wage benefited from it in 2016 (Jones and Seitani, 2019).

Spouses can also benefit from exemptions from social insurance contributions. For workers enrolled in employees' insurance, contributions amount to 30.1% of wages – 18.3% for pensions, 10.0% for health care (the rate for Health Insurance Associations that cover most SME employees) and 1.8% for long-term care – shared equally by employees and employers. An exemption from contributions for dependent

spouses of workers enrolled in employees' insurance was introduced in 1985. Currently, spouses working more than 20 hours a week in firms with more than 100 employees are exempt from contributions if they earn below JPY 88 000 monthly, which is equivalent to JPY 1.06 million (USD 8 154) annually. When spouses are not covered by employees' insurance, spouses can earn up to JPY 1.3 million annually before they lose the exemption and have to pay their own contributions. In addition, the survivor's pension, which a surviving family can receive when a worker enrolled in employees' insurance dies, also affects women's labour supply (Kitao and Mikoshiba, 2022).

For the (special) spousal deduction scheme, the income threshold for second earners was raised to JPY 1.5 million (USD 11 538) in 2018 and phases out gradually to zero at JPY 2.01 million. In addition, the tax deduction was limited to main earners with income of less than JPY 11.95 million (USD 93 846). By allowing second earners to earn more while the main earner can still claim the deduction, the reform is likely to boost labour inputs by married women.

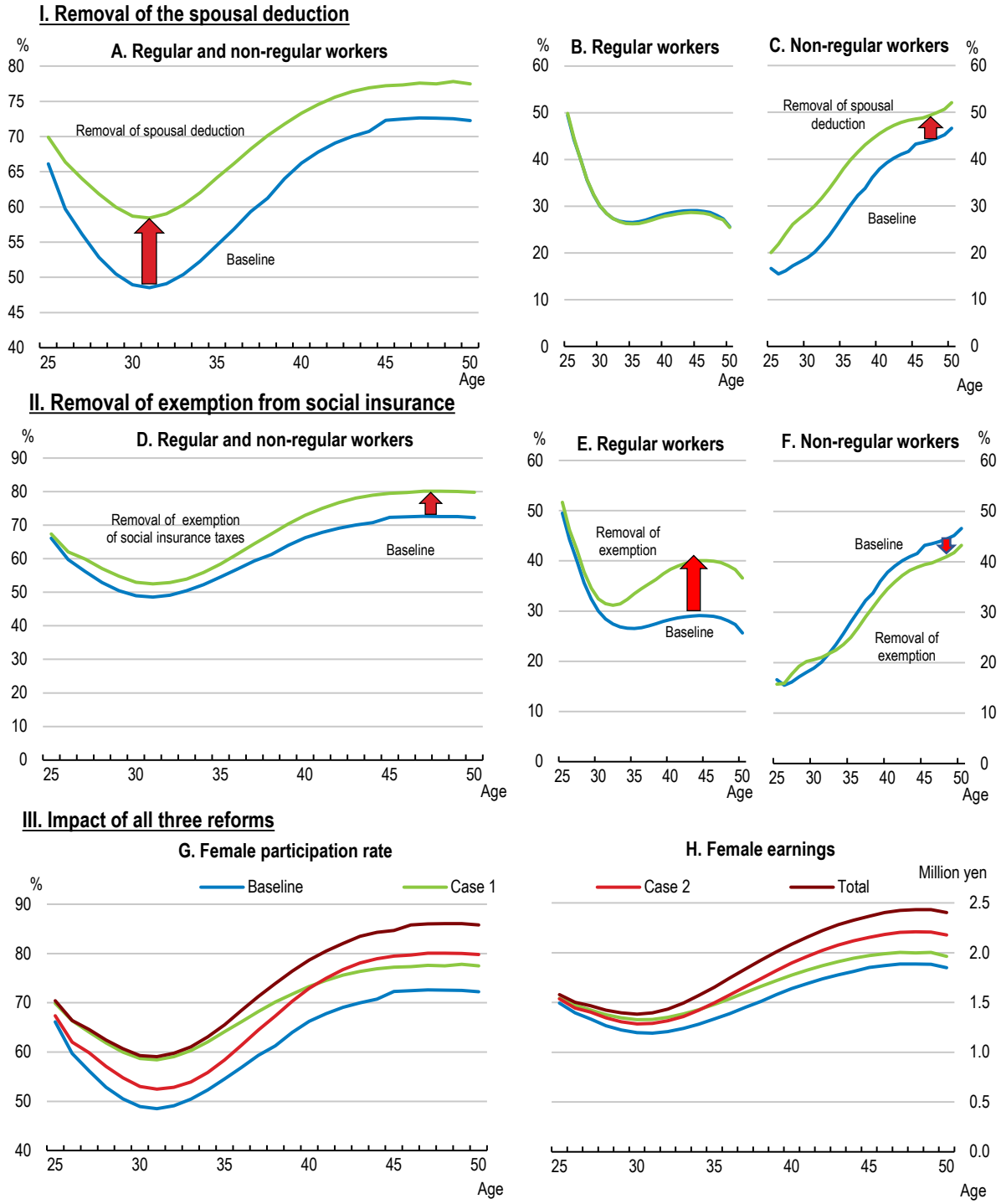
In sum, the multiple thresholds result in extremely high effective marginal tax rates on labour income of second earners, giving married women incentives to keep their earnings below JPY 1.06/1.3 million to avoid social insurance contributions, and JPY 1.5 million to avoid personal income taxes. They also have incentives to plan their labour supply taking into account a survivors' pension. A recent study estimated that abolishing the spousal deduction from personal income tax would significantly boost the female labour force participation rate (Figure 25, Panel A). For the 25-to-64-age group, the employment rate would rise by 6½ percentage points, with the increase concentrated among married women (Table 3). However, women would still have an incentive to keep their earnings below JPY 1.06/1.3 million) to maintain the exemption from social insurance contributions, thus limiting the impact on employment. Moreover, women would tend to choose non-regular jobs to keep their income below the threshold. Consequently, the rise in female participation from removing only the spousal deduction would be entirely due to women entering the labour force for non-regular jobs, while the share of regular workers barely changes in the simulation (Panels B and C).

Table 3. Female participation rates under alternative policy scenarios (for the 25-64 age group)

	Baseline	Case 1 No spousal deduction	Case 2 No exemption from social insurance contributions	Case 3 No survivor benefits	Case 4 Cases 1-3 combined	Change of Case 4 from baseline (%pt)
Employed	64.6	71.2	71.2	65.9	77.1	12.5
Regular worker	28.6	26.6	35.6	29.2	40.2	11.6
Non-regular worker	37.8	44.5	35.6	36,7	36.9	-0.9
Not in labour force	35.4	28.9	34.1	34.1	22.9	-12.5
By marital status						
Single: employed	86.9	89.2	87.5	87.5	89.9	3.0
Regular worker	57.4	57.6	58.7	58.6	59.1	1.7
Non-regular worker	29.5	31.5	28.8	29.0	30.7	1.2
Single: not in labour force	13.1	10.8	12.5	12.5	10.1	-3.0
Married: employed	59.9	67.2	67.7	61.3	74.4	14.5
Regular worker	20.4	20.0	30.7	23.0	36.2	15.8
Non-regular worker	39.5	47.2	37.1	38.3	38.2	-1.3
Married: not in labour force	40.1	32.8	32.3	38.7	25.6	-14.5

Source: Kitao and Mikoshiba (2022).

Figure 25. Tax and social insurance reform could boost female labour participation rates



Note: See the note to Figure 2.24 for the data source. In Panels G and H, Case 1 is the removal of the spousal deduction; Case 2 is the exemption from social insurance contributions and Case 3 is the abolition of the survivors' pension, which is not shown separately in the figure.
Source: Kitao and Mikoshiba (2022).

As highlighted in the *2019 OECD Economic Survey of Japan*, abolishing the exemption from social insurance contributions would also boost the female labour force participation rate (Figure 25, Panel D). As in the case of the spousal deduction, it would rise by around 6½ percentage points for the 25-64 age group (Table 3). However, the increase is expected to come from women joining the labour force to become regular workers. In addition, some shift from non-regular to regular jobs (Panels E and F). With

the removal of the exemption from social insurance contributions on earnings below JPY 1.06/1.3 million, married women have stronger incentives to work more and in a regular job, if possible. Consequently, the increase in the women's average earnings (estimated at 16%) would be larger than in the case of removing the spousal exemption (7%).

The impact of combining all three reforms – abolishing the spousal allowance, the social insurance contribution exemption and the survivor's pension – is shown in Figure 25, Panel G. The female participation rate for the 25 to 64 age group is estimated to rise by 12.5 percentage points (Table 3). The increase results primarily from an estimated 14.5 percentage-point rise for married women, which is attributed entirely to an increase in regular employment. This leads to a 28% rise in women's average earnings (Panel H), thus significantly narrowing the gender wage gap and boosting tax revenues (Kitao and Mikoshiba, 2022).

Tackling discrimination against women

In 2003, the government announced a target of boosting the share of leadership positions held by women to 30% by 2020. Nevertheless, the proportion of women in leadership roles remains low by international standards despite their rising education level and the enactment of gender equality laws. Women held only 13.2% of management positions in Japan in 2021, the lowest in the OECD (Figure 26), suggesting a serious misallocation of human resources, which contributes to Japan's large gender wage gap (see above). Moreover, women held 15.5% of the seats on the boards of the largest publicly-listed companies in 2022, about half of the OECD average (OECD Gender Data Portal), and 4.2% of senior management positions in government in 2021 (OECD, 2021a). The size threshold at which firms are required to establish an action plan to encourage the promotion of female employees was lowered from more than 300 workers to more than 100 in 2022. In June 2023, the government announced that the Tokyo Stock Exchange and some other markets would include a provision in their regulations that each company in the top-tier Prime Market shall aim to increase the ratio of female executives to 30% or more by 2030. The companies are encouraged to craft action plans to achieve the objective. The share of women in the lower house of the Diet edged up from 7.9% in 2012 to 10.3% in 2023, but remained the lowest in the OECD.

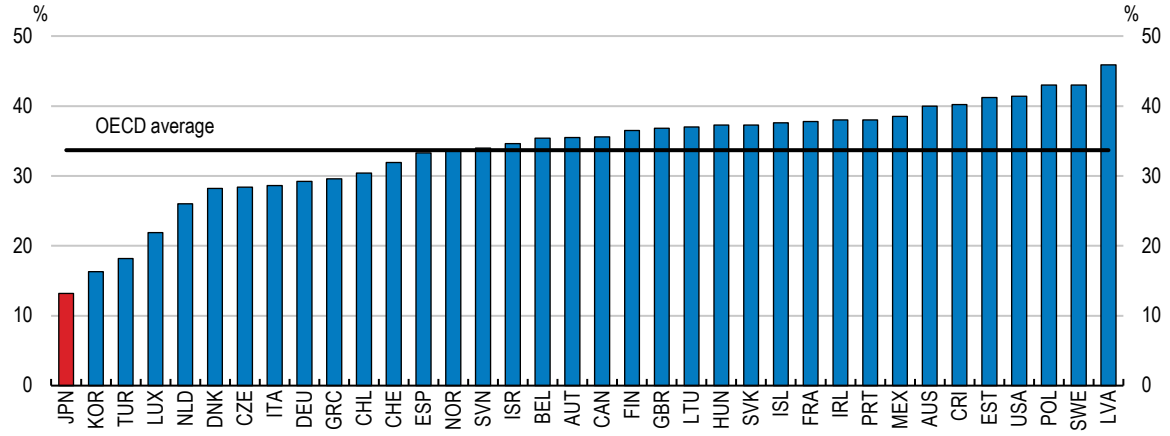
One factor contributing to the lack of women in leadership positions is the smaller share of women in higher education. In 2022, women accounted for 45% of university students, and nearly 80% studied liberal arts. Moreover, women accounted for only 17% of new tertiary students in science, technology, engineering and mathematics (STEM) (OECD, 2023c). Promoting greater female participation in STEM disciplines, for example through mentor programmes, is key. However, having as much or more education than men does not result in equal outcomes for women (Yamaguchi, 2016). Tenure plays an essential role in determining wages and promotions in Japan's seniority-based system. The average length of female employment is shorter than that of men, given that almost one-third of women withdraw from the labour market when they have their first child. In addition, working long hours is often a prerequisite for promotion, prompting many women with family responsibilities to opt out of career tracks. Women's share of workers in managerial positions is significantly lower than for men with the same tenure (Yamaguchi, 2016).

Differences between men and women in age, education and tenure explain only 20-30% of the gender gap in management positions, with labour practices accounting for much of the remaining inequality (Youm and Yamaguchi, 2016). Women are less likely to enter fast-track career streams leading to management positions. Instead, they tend to enter the clerical work track in the "Career Track-Based Management System" (the "course system"), which makes it difficult for women to escape from low-paying jobs (Hara, 2018). Moreover, firms are less likely to invest in on-the-job training for women to acquire firm-specific skills, given that many are likely to withdraw from the labour force around the time of childbirth. This self-fulfilling prophecy is another reason for the "leaky labour market pipeline" to management positions for women (Naito, 2016). In addition, working long hours is a way to demonstrate commitment to the firm and the ability to accumulate firm-specific human capital. Men, who play a smaller role in housework and

childcare (Figure 18), are more likely to be promoted (Kato et al., 2016). In sum, Japanese women face a "sticky floor" at the low end of the wage distribution due to a gendered job system and a glass ceiling at the high end due to a gender gap in promotion (Hara, 2018). Hence, limiting overtime working hours and incentivising teleworking could help (see above).

Figure 26. Women's share of management positions is low

2021 or latest year

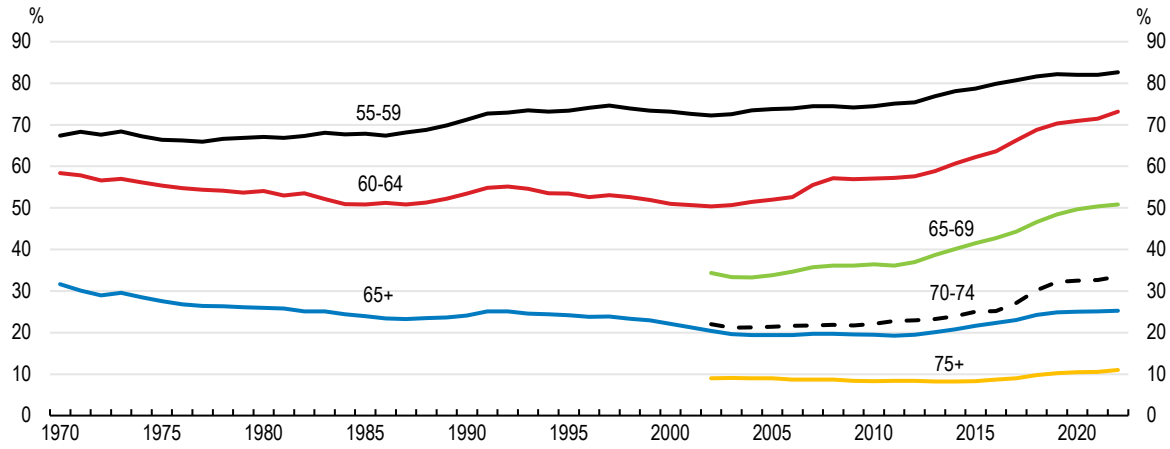


Source: OECD, Gender database.

Removing obstacles to the employment of older persons

Reducing impediments to the employment of older persons would enhance well-being by boosting labour and pension income for the elderly, lowering their relative poverty rate and promoting economic growth. Employment rates for men and women in their 60s declined gradually until 2000 (Figure 27), reflecting the increasing generosity of public pensions and the falling number of self-employed workers (Usui et al., 2016). However, the employment rates for five-year age cohorts from 55-59 to 70-74 have each risen between 10 and 21 percentage points since 2002, driven by: *i)* longer healthy lifespans; *ii)* increased educational attainment of older persons; *iii)* the shift to less physically demanding jobs; and *iv)* policy measures, including a rise in the pension eligibility age (Oshio et al., 2019). The employment rate for those aged 65 and above in Japan was 25% in 2021, well above the 15% OECD average.

Figure 27. Employment rates for older persons have trended up in the past few decades

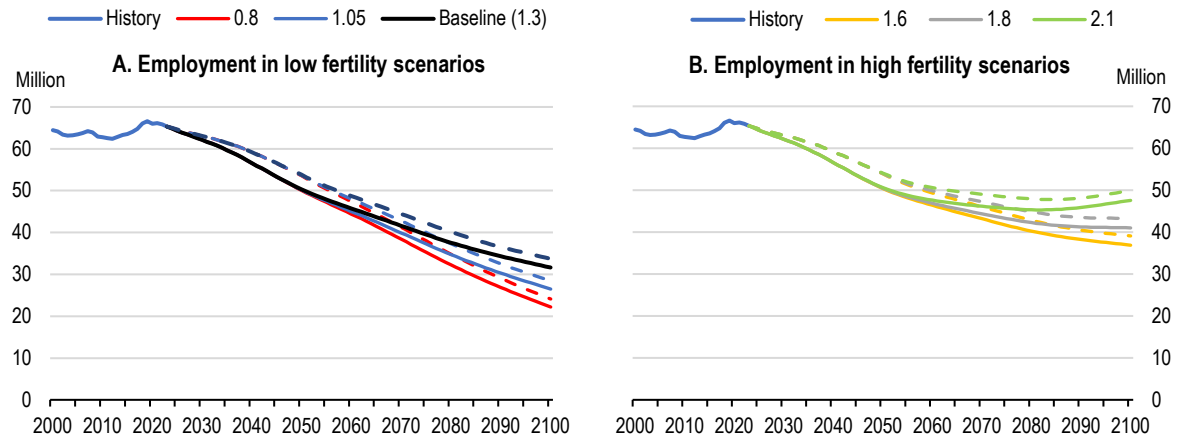


Source: OECD, Labour Force Statistics database.

A 2019 government survey asked men and women in their sixties about their ideal retirement age. The most common response (32.1%) was "want to work as long as possible, regardless of age", followed by those who want to work "until 70 or older" (23.6%). Another 13.8% wanted to retire between the age of 65 and 69. The major motives for wanting to work were "economic reasons" (76.4%), "purpose in life and social participation" (33.4%) and "having time on their hands" (22.6%). Of those who cited economic reasons for working, more than four-fifths said that they worked to maintain current standards of living (JILPT, 2020a). Good health conditions among the elderly would allow many of those who wish to work to continue. One study examined the relationship between health and employment for people in the 51 to 54 age group. Based on that relationship, it estimated that employment of those aged 60-64 would increase by around one-fifth based on their current health assessment, and by more than one-third for those aged 65-69 (Usui et al., 2017).

According to OECD simulations, if the employment rate for each of the 60-64, 65-69 and 70-74 cohorts were to converge to that of the five-year cohort immediately younger by 2050, total employment would be 6.6-8.5% higher in 2100 in "low fertility" scenarios (Figure 28, Panel A) and 5-6% higher in "high fertility" scenarios (Panel B). While a rise in the employment rate for the over-75 age group is not included in the simulation, their rate is also likely to increase. The factors noted above – higher educational attainment, longer life expectancy, improved health and the changing nature of work – will continue to facilitate the employment of older persons. Indeed, Japan's healthy life expectancy is the longest, both at birth (74 years) and at age 60 (20 years) (WHO, 2023).

Figure 28. Long-run labour force projections with a rise in the employment rate of older persons



Note: The dotted lines show a rise in the employment rate of older persons in each fertility scenario. The simulation assumes that the employment rate for each five-year cohort from 60-64 to 70-74 converges to that of the preceding cohort (i.e., the rate for the 60-64 group would rise to the 2021 rate for the 55-59 age group, the 65-69 rate would rise to the 60-64 rate, the 70-74 rate to the 65-69 rate by 2050).
Source: OECD calculations based on the OECD Long-term Model.

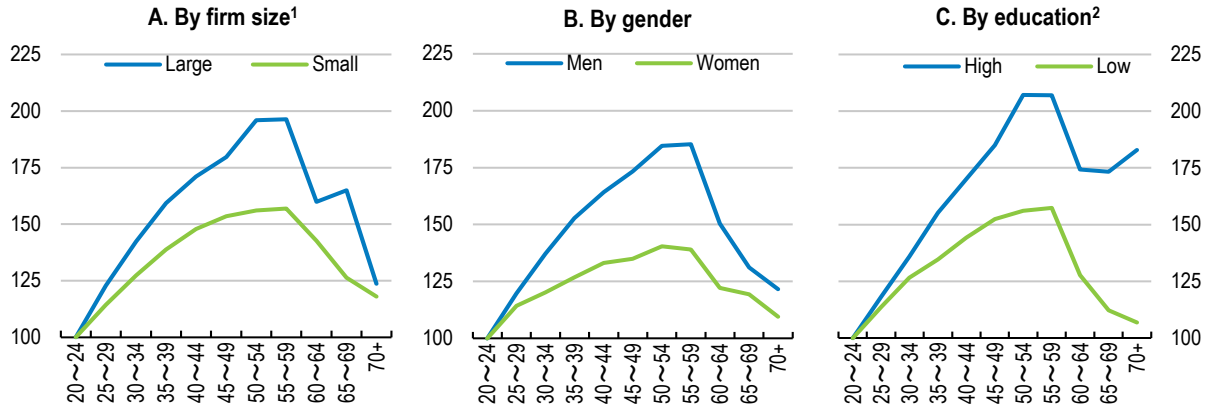
Fundamental labour market reform is essential to reinforce these trends. Japan's traditional model – lifetime employment, a seniority-based wage and promotion system, long working hours, company-based training and mandatory retirement – was successful when Japan's population was young and increasing, with a pyramid-shaped age distribution. It is poorly suited, however, to an era of 100-year lives because it discourages labour force participation by older persons and women, and labour mobility. More flexible wage and employment systems based on performance rather than age would enable Japan to better utilise its human capital and raise productivity. As recommended in the *2019 OECD Economic Survey of Japan*, the careers of older persons can be extended by: *i)* abolishing the right of companies to set a mandatory retirement age, while reducing the importance of seniority in setting wages; *ii)* raising the pension eligibility age beyond the current target of 65; and *iii)* expanding lifelong training and education for older persons to provide them with the skills for an increasingly digital economy.

Abolishing mandatory retirement and moving away from seniority-based wages

Lifetime employment is an implicit long-term contract for regular workers, particularly those in larger enterprises. Firms hire new graduates with the promise of a job until the mandatory retirement age. The long-term commitment encourages employers to invest in their workers to develop company-specific skills, thus raising firms' competitiveness and productivity (Jones and Seitani, 2019). Wages rise steeply with seniority, particularly in large firms and for men and workers with tertiary education, until mandatory retirement (Figure 29). Seniority-based wages encourage lifetime commitment by workers to their firm by setting wages below marginal productivity for younger workers and above it for those with long tenures. The seniority-wage link in Japan, controlling for skills and other factors, is among the strongest in the OECD. A cross-country study of the relationship between the age-wage premium and the retention rate of employees between the ages of 60 and 64 shows a negative correlation in the OECD (OECD, 2018a). The seniority-based wage system makes older workers unattractive to firms once their productivity falls below the seniority-based wage. Mandatory retirement is essential for the firm to end the continuous wage increases of its regular employees resulting from the seniority-based wage system and high employment protection for regular workers (Miyamoto, 2016).

Figure 29. Japan's seniority-based wage system remains strong

The wage profile for regular employees, 20-24 age group = 100, 2021



1. Large firms are those with more than 1 000 employees and small firms are those with between 10 and 99.
2. High refers to university graduates and low refers to high school graduates.

Source: Ministry of Health, Labour and Welfare, *Basic Survey on Wage Structure 2021*.

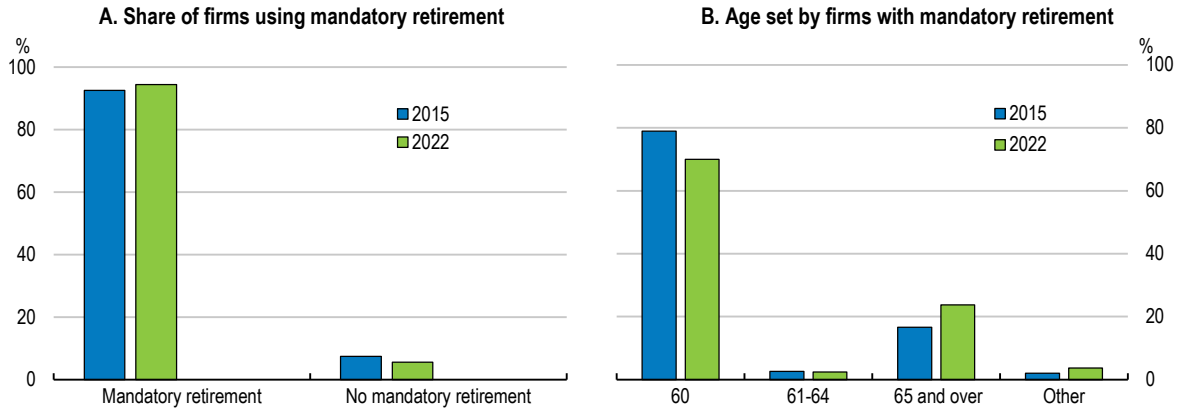
Ending mandatory retirement

In 2022, 94% of firms set a mandatory retirement age (Figure 30, Panel A). In 1998, the government prohibited firms from setting a mandatory retirement age below 60, and in 2013, firms were required to offer continued employment until age 65 for employees who wish to continue working. Few firms have opted to raise their mandatory retirement age or eliminate it, reflecting the cost of seniority-based wage increases. Indeed, among the firms with mandatory retirement, the share of firms that set it at age 60 decreased only from 79% in 2015 to 70% in 2022 (Panel B). This option – keeping the mandatory retirement age at 60 and rehiring workers – is particularly popular at companies that include a large seniority component in their wage system (OECD, 2018a). The 9 percentage-point decline in the share of firms that ended mandatory retirement at age 60 between 2015 and 2022 was accompanied by a 7 percentage-point increase in the share raising it to age 65 and above.

Although the 2013 law helped to push up the employment rate for the 60-64 age group, a large share became non-regular workers (Figure 31). The percentage of men (women) who were non-regular workers

jumped from 11% (59%) for the 55-59 age group to 45% (74%) in 2022. The average job quality of older persons is generally poor and wages are low because of mandatory retirement (Yashiro, 2018). A survey of workers in their 60s found that 18% of rehired employees earned the same as previously, while the 57% faced lower wages. Nearly 6% had a wage reduction of more than 40% (JILPT, 2020b). Overall, workers in large firms in the 60-64 age cohort faced wage reductions of 19%. For those 70 or above, wages were 37% below their peak in the 55-59 age group in 2021 (Figure 29). Demoting older workers to non-regular status at substantially lower wages reduces their motivation to work and prompts some employees to leave their firms, leading to a significant loss of human capital.

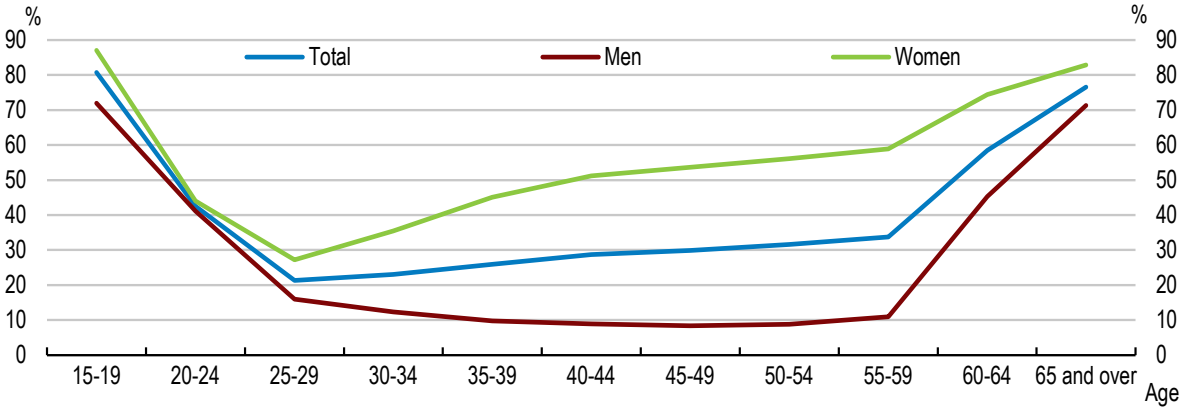
Figure 30. Most companies still set a mandatory retirement age of 60



Source: Ministry of Health, Labour and Welfare, *General Survey on Working Conditions*.

Figure 31. Many workers become non-regular employees at age 60

Non-regular employees as a share of all employees (excluding executives) by age, 2022



Source: Ministry of Internal Affairs and Communications, *Labour Force Survey (Basic Tabulation), 2022.*

Japan introduced a law in 2020 encouraging firms to keep employees until age 70, though not necessarily within the firm itself, through one of five options: *i)* raising the retirement age to 70; *ii)* allowing employees to work beyond the age of mandatory retirement; *iii)* outsourcing operations to retirees who start their own business; *iv)* assigning retirees to philanthropic projects; and *v)* ending mandatory retirement. A 2022 survey by the Ministry of Health, Labour and Welfare found that 28% of companies had followed the recommendation. The share was larger at companies with 21-30 employees (31%) than at those with more than 300 employees (20%) (MHLW, 2022). The optimal solution is to abolish the right of firms to set a mandatory retirement age, a practice prohibited in the United States and some European countries as age discrimination. The uniform dismissal of workers by age despite individual differences in productivity is

neither fair nor efficient (Yashiro, 2018). Providing people with better opportunities to continue working at an older age is critical in the face of population ageing. The OECD Recommendation of the Council on Ageing and Employment Policies called for governments to "discourage or further restrict mandatory retirement by employers" (OECD, 2018b). Preventing age discrimination would also help. Japan does not have general age discrimination legislation.

Flattening the seniority wage curve

Ending mandatory retirement, or even increasing the minimum retirement age allowed, would push firms to align better the costs of employing older workers and their productivity. Indeed, the hike in the retirement age from 55 to 60 in the mid-1980s significantly flattened Japan's seniority wage curve (Clark and Ogawa, 1992). The OECD Recommendation of the Council on Ageing and Employment Policies urged employers and workers to "review their practices in setting pay to reflect productivity and competencies, not age" (OECD, 2018b).

Japanese firms are giving greater weight to job duties and performance and less to seniority. The "equal pay for equal work" principle in the 2018 Work Style reform is a positive step. It links workers' wages to productivity (Miyamoto, 2016), although workers prefer seniority-based wages. Wages are ultimately decided by employers and employees, making it problematic for the government to change wage-setting mechanisms. The public sector could provide an example by stressing performance-based pay and limiting automatic wage hikes with tenure. The retirement age for national and local civil servants was raised from 60 to 61 in April 2023 and will be gradually increased to 65 by FY2031. Although they remain regular workers, their wages will be cut by 30% at the beginning of the first fiscal year after reaching age 60, which appears inconsistent with the equal pay for equal work principle. The government will review and take actions on the wage reduction by the end of FY2031.

Moreover, reducing the weight of seniority in wage-setting would encourage labour mobility through mid-career hiring (so-called "secondary hiring"), as workers who change firms would not experience the wage losses typical in a seniority-based system. Younger workers could receive higher wages rather than accepting lower pay in exchange for a promise of higher pay in the future. Enhancing mobility also requires reforming the retirement allowance, a deferred payment of wages, rewards and benefits for long-term labour, thereby encouraging lengthy tenures. Personal income tax deductions on the retirement allowance increase sharply from JPY 400 000 per year to JPY 700 000 (USD 5 385) after 20 years of tenure. Smoothing the tax deduction, as recommended in the *2019 OECD Economic Survey of Japan*, could facilitate mid-career labour mobility.

Further increasing the pension eligibility age

Japan, along with Korea, is unique in allowing firms to set a mandatory retirement age (60) below the pension eligibility age (65 for the flat-rate portion of the Employees Pension Insurance and 64 and 62 for men and women, respectively, for the earnings-related portion). An OECD study found that raising the minimum and standard eligibility age by one year boosted the labour participation rate of the 55-74 age group by 0.8 percentage points in the median OECD country (Geppert et al., 2019). Abolishing mandatory retirement and eliminating other obstacles to the employment of older persons would facilitate further hikes in the pension eligibility age, which has not kept pace with the rise in life expectancy. As noted above, Japan's healthy life expectancy is the longest in the world. Even after reaching 65 in 2025 for men and 2030 for women, the eligibility age will remain below many other OECD countries. In 2018, the OECD Recommendation of the Council on Ageing and Employment Policies stated that countries should "ensure that the old-age pension system encourages and rewards later retirement in line with increased life expectancy" (OECD, 2018b).

In addition to removing an obstacle to the employment of older persons, later retirement would also reduce poverty among this age group. The 20% relative poverty rate of the elderly in Japan is well above the

12.5% OECD average. Under its current framework, the net replacement rate of public pensions is one of the lowest in the OECD at 38.7% for an individual who begins working at age 22 in 2020, far below the 62.4% OECD average (OECD, 2021b). The government's 2014 actuarial valuation shows that delaying the start of pension benefits to 68 would increase the replacement rate by more than ten percentage points by 2050 (Table 4). In addition, it would improve intergenerational equity and reduce fiscal costs. The government's decision to calculate pension benefits annually even when a beneficiary is still working (instead of being recalculated only at the time of termination of employment or on reaching the age of 70) and increasing the income threshold beyond which earnings-related pensions are reduced for people aged 60 to 64 has removed some work disincentives for the elderly.

Table 4. Raising the pensionable age leads to a significant rise in the replacement rate

	Real GDP growth rate (%)		Replacement rate (%) in 2050 for pension eligibility age of:		
	FY2014-23	FY2024 onwards	65 years	68 years	70 years
Case C	2.0	0.9	51.0	63.9	72.5
Case E	2.0	0.4	50.6	63.3	71.8
Case G	1.2	-0.2	42.0	52.8	60.0
Case H	1.2	-0.4	41.9	52.7	59.8

Note: This table shows four of the eight simulations done by the Ministry of Health, Labour and Welfare. Total pension benefit payments are fixed, resulting in variations in the replacement rate for different GDP growth rates and pension eligibility ages. For the pension eligibility age of 65, the replacement rate shown for persons is for 2058 for Case G and 2054 for Case H.
Source: Ministry of Health, Labour and Welfare (2014), *Summaries of the 2014 Actuarial Valuation and Reform Options.*

Promoting lifelong learning

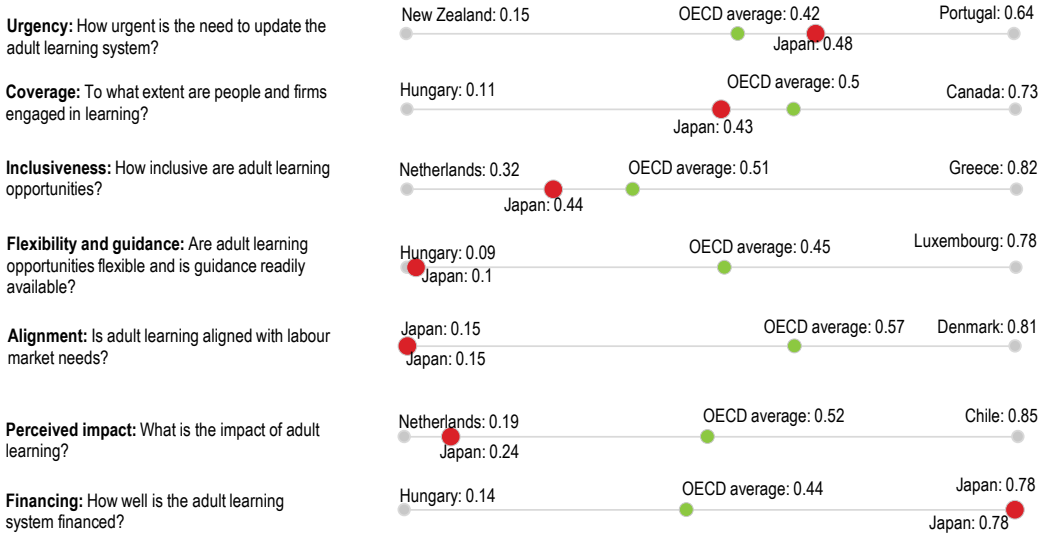
Education and training need to be adapted to benefit as much as possible from people's skills and potential as they age. The traditional three-stage pattern of education, career and retirement is no longer well-suited to rising generations, among whom many will live 100 years, and the accelerating pace of technological change. The skills learned by people in their teens or early 20s are inadequate for a career likely to extend into their 70s or even 80s (Gratton and Scott, 2017). Moreover, skills erode with age. Shifts in the Beveridge curve (the relationship between the unemployment and vacancy rates) indicate a deterioration in the matching process between job vacancies and job seekers since 2000 in Japan (OECD, 2021a). A well-functioning system of lifelong learning is essential to help workers adjust to changes in the labour market. The government and firms must enable workers of all ages to maintain and acquire appropriate skills (OECD, 2018c), thereby extending careers and mitigating demographic headwinds.

Japan's system of lifelong education and training is less developed than in many other OECD countries, especially with respect to off-the-job training (OECD, 2018c). From an international perspective, participation in training in Japan is low and is focused on firm-specific training. On-the-job training is the principal approach to skills development, encouraged by traditional Japanese employment practices, such as lifetime employment. With lifetime employment weakening, firms are less inclined to provide on-the-job training. Meanwhile, higher education institutions have focused on general education, leaving companies to provide job-specific skills. Tertiary institutions emphasising vocational education have seen a decline in enrolments as students shifted to universities. Consequently, the role of external training providers remains negligible in Japan and relatively few adults engage in structured training activities (OECD, 2021c).

The OECD Priorities for Adult Learning dashboard compares OECD member countries across seven dimensions, showing to what extent their adult learning systems are ready to help people develop and maintain relevant skills (OECD, 2019b). While Japan ranks highest in financing, it is among the bottom ten countries in five areas – coverage, inclusiveness, flexibility and guidance, alignment with skill needs and perceived training impact (Figure 32).

- *Coverage and inclusiveness*: persons most in need of adult learning, typically non-regular and low-skilled workers, have fewer opportunities (OECD, 2018c). In 2017, 63% of Japanese firms furnished on-the-job training to their regular employees, but only 28% to their non-regular employees. Breaking down labour market dualism would help promote inclusiveness in training (OECD, 2021c). In addition, while 35% of employees participate in training in any given year, the share falls to 22% for older employees (OECD, 2019b).
- *Flexibility*: the opportunity cost of adult learning is high, given long working hours in Japan. Shorter and more flexible training opportunities would help increase coverage.
- *Perceived training impact and alignment with skill needs*: Japanese participants in adult learning were the second-least likely to view it as useful. Nearly 70% of Japanese workers state that more training is necessary for their jobs. As for employers, 89% report hiring difficulties.

Figure 32. Japan ranks low on the OECD's Priorities for Adult Learning dashboard



Note: The seven dimensions of the dashboard aggregate multiple indicators. Indicator scores are normalised (min-max) for the aggregation and the aggregate scores are therefore the relative performance of countries. The index is from 0 to 1, with a higher score indicating a better performance.
Source: OECD (2021), *Creating Responsive Adult Learning Opportunities in Japan, Getting Skills Right*.

The role of junior colleges (*tanki daigaku*), which offer two-year programmes focusing on vocational education, had declined significantly, as the falling number of young people created more opportunities in universities. Indeed, the number of junior college students fell 74% over 1995-2016, while the number of junior colleges fell 43% (Jones, 2022). To overcome the misalignment of training and labour market needs, the government has stressed the importance of enhancing universities' role in vocational training by strengthening their links to the business sector. In 2017, only 8% of universities and public institutions offered formal courses for adult education and the share of part-time students in tertiary education was 7% (OECD, 2021c). The 2018-22 National Basic Plan for the Promotion of Education aimed to improve access to lifelong learning by encouraging universities to play a more significant role.

However, university programmes tend to provide in-depth courses that take considerable time, which may not meet the needs of firms and workers. In 2019, Japan launched professional and vocational universities and junior colleges. By 2023, 23 institutions had been created, of which 20 were in the private sector. These new institutions are to provide practical, creative vocational education in cooperation with the business sector, in contrast to conventional universities. Given their close cooperation with the business sector, these new institutions could be a model to expand lifelong learning. Moreover, as workers, employers and society share the benefits of lifelong learning, the cost should also be shared. Otherwise, the "working poor", primarily non-regular and low-skilled workers, risk being excluded (OECD, 2018a).

Making greater use of foreign workers

International experience demonstrates that the medium and long-term effects of migration on public finance, economic growth and the labour market are generally positive (OECD, 2016b). Immigration can raise tax revenue and social security contributions, increase the labour force and fill skill gaps. The number of foreign residents in Japan almost tripled from around 1 million in 1989 to 3.1 million in 2022 (Figure 33, Panel A). Japan emerged as a long-term migration destination in the 1990s (Korekawa, 2022), and ranked twelfth among OECD countries in 2019 (Panel B). Its long-term inflows have been concentrated among labour migrants; in 2019, 60% were labour migrants and 25% were family, in contrast to the United States, where 69% were family and 10% humanitarian.

Despite rising immigration, foreign-born residents of Japan account for only 2.3% of Japan's population, one of the lowest shares in the OECD (Panel C). Only about a quarter of the foreigners living in Japan at the end of June 2023 were permanent residents, reflecting the strict requirements compared to other OECD countries. Foreign nationals need to satisfy certain requirements to obtain permanent residence status in Japan. In principle, they must live ten continuous years in Japan, although there are exceptions. In contrast, in European countries and Korea, migrants are generally eligible for permanent residence after no more than five years and skilled migrants in Australia, Canada and New Zealand are granted permanent residency upon arrival (OECD, 2024).

The number of Japanese living abroad was 1.3 million in 2022, less than half of the registered foreign population in Japan. On a flow basis, the net emigration of Japanese, which averaged 33 000 a year over 1990-2010, has been close to zero since 2010 (Figure 34). The number of foreigners entering Japan has exceeded the number departing by an increasing margin since 2013, with a pause during the pandemic. The inflows have slowed the decline in Japan's population. The native Japanese population fell by 0.4% in 2019 as the number of deaths exceeded births, but the drop in the total population was cut to 0.2% by the increasing number of foreigners moving to Japan.

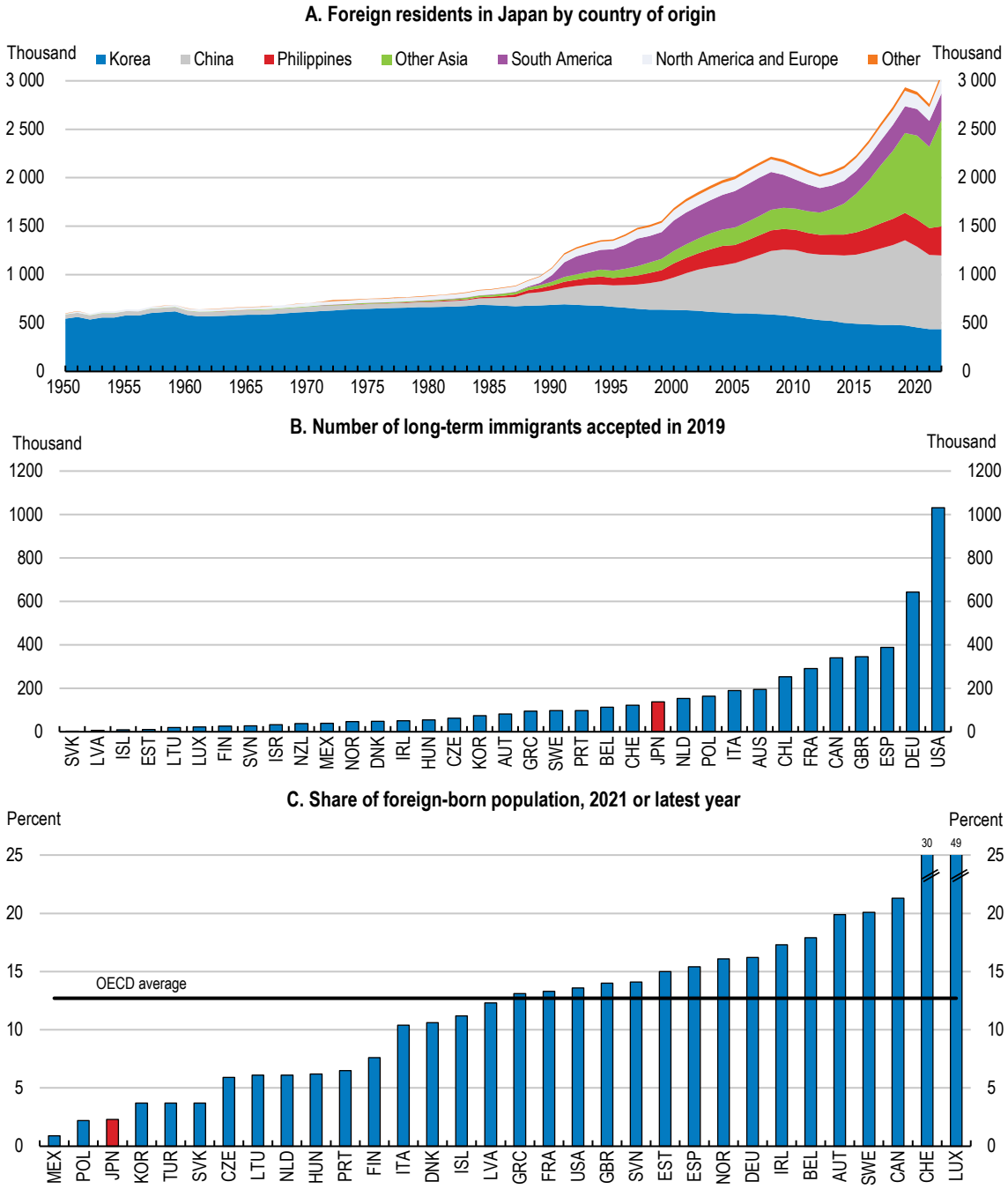
Foreign workers in Japan

Many studies calculate that Japan will have to rely more on foreign workers to maintain production levels, with the estimates varying widely depending on their assumptions. For example, Japan will face a shortage of more than 11 million workers by 2040 according to one study (Recruit Works Institute, 2023). The Japan International Cooperation Agency estimated that Japan needs 4.2 million foreign workers by 2030 and 6.7 million by 2040 to achieve the government's long-run medium growth scenario (JICA, 2022). Achieving the 2040 target would require the number of foreign workers to rise by 270 000 per year, more than double the 114 000 pace over the past decade (Figure 35). The number of foreign workers reported by Japanese firms increased by 2.7 times from 0.69 million in 2011 to 1.82 million in 2022, reflecting the easing of rules limiting their entry and labour shortages. The employment rate of foreign residents was 77% in 2020, matching the rate for the native-born (OECD, 2022). Nevertheless, foreign workers accounted for only 2.6% of Japan's labour force, one of the lowest shares in the OECD.

In 2022, foreigners employed based on their "resident status" accounted for one-third of foreign workers (Figure 35). About a quarter are (permanent) residents, which includes the Japan diaspora (*Nikkeijin*) and descendants of Japanese who emigrated, notably to South America, up to the fourth generation. The remainder are primarily spouses of Japanese or (permanent) residents.

The other 1.23 million foreign workers in 2022 were divided between three categories. First, a quarter were experts in professional and technical fields (Figure 35). This category includes those in the Specified Skilled Worker Programme introduced in 2019 (see below).

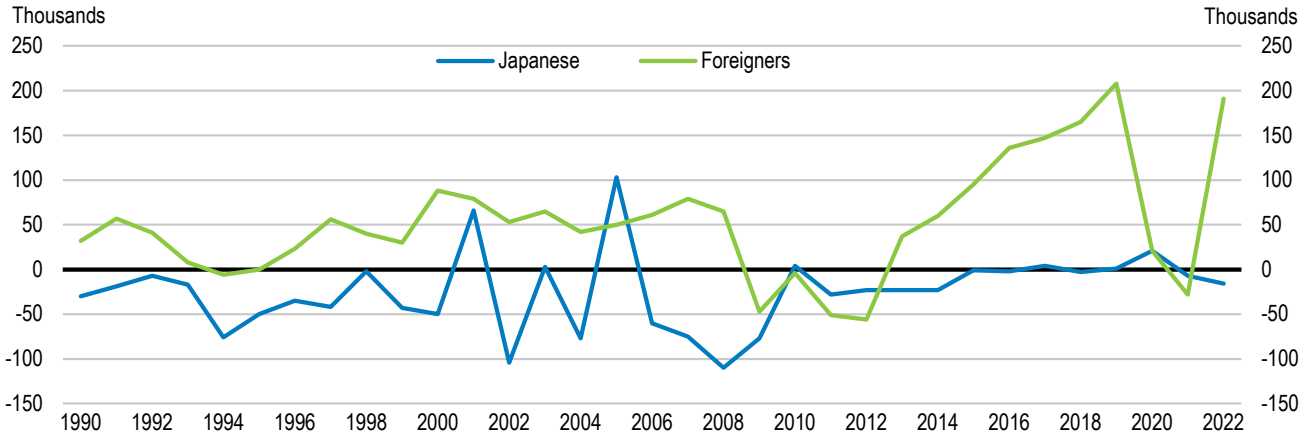
Figure 33. Japan's foreign population is relatively small but increasing



Note: Panel A – Korea includes those who went to Japan before 1945 and their descendants and newcomers since 1945, China includes Taiwan, and "Other" is Africa, Oceania and stateless persons. Panel C – the OECD area is a weighted average.
Source: Ministry of Justice, *Foreign Citizens Registration Data*; OECD, *International Migration Outlook 2022.*

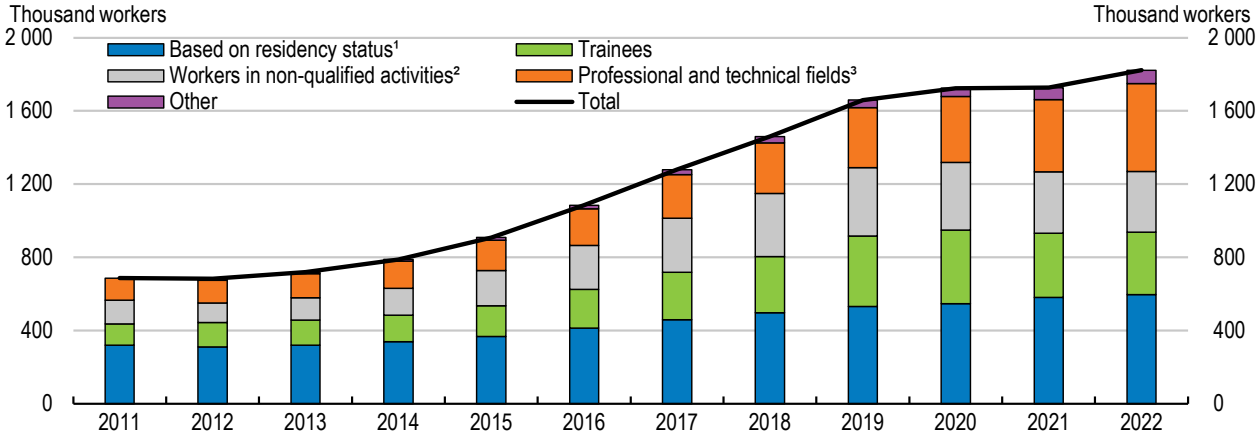
Figure 34. Net emigration of foreigners to Japan has risen since 2012

Negative values mean that the number of departures exceeds that of entrants



Source: Compiled from Population Estimates, Statistics Bureau, Ministry of Internal Affairs and Communications.

Figure 35. The number of foreign workers in Japan is rising



1. Includes (permanent) residents and spouses of Japanese or (permanent) residents.
2. Persons who have permission to engage in activities outside of their visa status. This group consists primarily of international students.
3. Includes professors and teachers, artists, religious teachers, journalists, business management (including corporate intra-industry transfers), legal and accounting services, health and nursing care, entertainment, research, engineers and specialists in humanities and international services.

Source: Ministry of Health, Labour and Welfare (2023), *Summary of Notification Status Indicating "Employment Status of Foreigners"*.

Second, around one-fifth of foreign workers were trainees under the Technical Intern Training Programme, which began in 1993. Trainees are placed with a specific employer and allowed to work in Japan for three to five years without their families. Trainees are concentrated in manufacturing (58%) and construction (17%). About three-quarters come from Vietnam, Indonesia and the Philippines. Japan's large-scale use of trainees is unique among OECD countries. It accounted for 93% of foreign trainees admitted to OECD countries over 2019-21 (OECD, 2022).

The programme's stated purpose is to promote developing countries' growth by transferring expertise and skills to trainees. However, in practice, both workers and employers have used it largely as a labour migration programme (OECD, 2024). Trainees are bound to their employer, limiting their mobility and bargaining power, which can make them susceptible to exploitation, such as employers not paying trainees and harassing them. In addition, excessive fees charged by some of the brokers who act as intermediaries between Japanese firms and potential foreign trainees result in some trainees being indebted when they

arrive in Japan (OECD, 2024). Although trainees have been treated as employees under labour laws since 2010, a 2017 government report found that 71% of firms with trainees violated the Labour Standards Act, primarily related to working hours and safety standards (MHLW, 2018). In 2017, the government enforced the Act on Proper Technical Intern Training and Protection of Technical Intern Trainees, with penalties attached to "reduce human rights violations", stating that "trainees are no different from Japanese labourers" (OECD, 2019a).

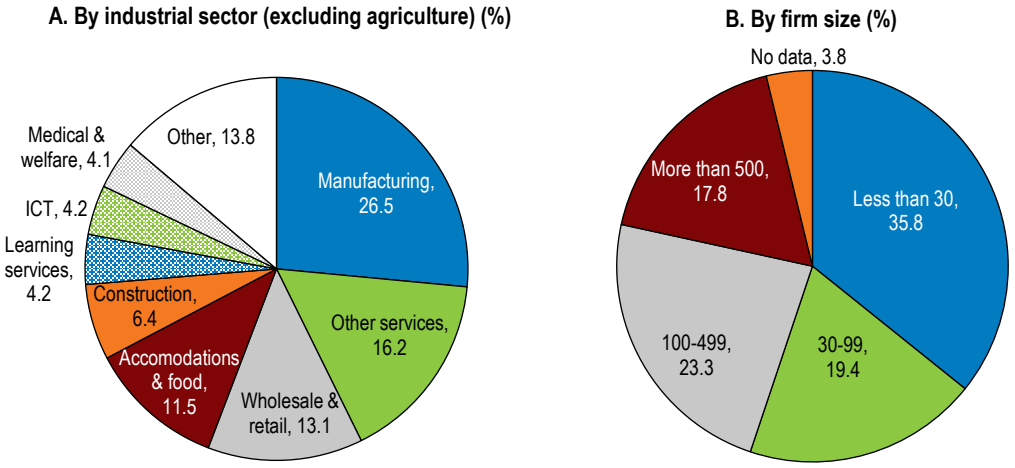
Third, persons with permission to engage in activities outside their visa status accounted for another fifth of foreign workers in 2022 (Figure 35). International students, who comprise 78% of this group (MHLW, 2023b), can be authorised to work up to 28 hours per week. Inflows of international students amounted to around 125 000 annually in the years just prior to the pandemic. The number of work authorisations suggests that around 90% of international students work while enrolled in school (OECD, 2019a). However, the share is less because some international students have two jobs. China and Vietnam account for about two-thirds of international students working in Japan.

The characteristics of foreign workers vary significantly between country of origin, location in Japan, their status, industrial sector and size of firm (MHLW, 2022b):

- China and Vietnam each accounted for about a quarter of foreign workers in Japan in 2021, with four other Asian countries – the Philippines, Nepal, Korea and Indonesia – providing another quarter. The migration of foreign workers primarily from middle-income countries reflects Japan's worker shortages in labour-intensive sectors.
- Nearly 45% of foreign workers were employed in three of the most populous prefectures – Tokyo, Aichi (includes Nagoya), and Osaka. In Tokyo, international students and workers in professional and technical fields are most common, while trainees usually work outside major cities.
- More than half of foreign workers were in the service sector, focusing on wholesale and retail trade and the hospitality industry, and around a quarter in manufacturing, typically as trainees (Figure 36, Panel A). Workers in knowledge-intensive sectors of information and communications technology and learning support accounted for 8% of foreign workers.
- Most foreign employees work in small firms. More than 55% were employed in firms with less than 100 workers, while 17.8% worked in firms with 500 or more workers (Panel B).

Figure 36. Foreign workers tend to be employed in small firms and in the service sector

In 2022

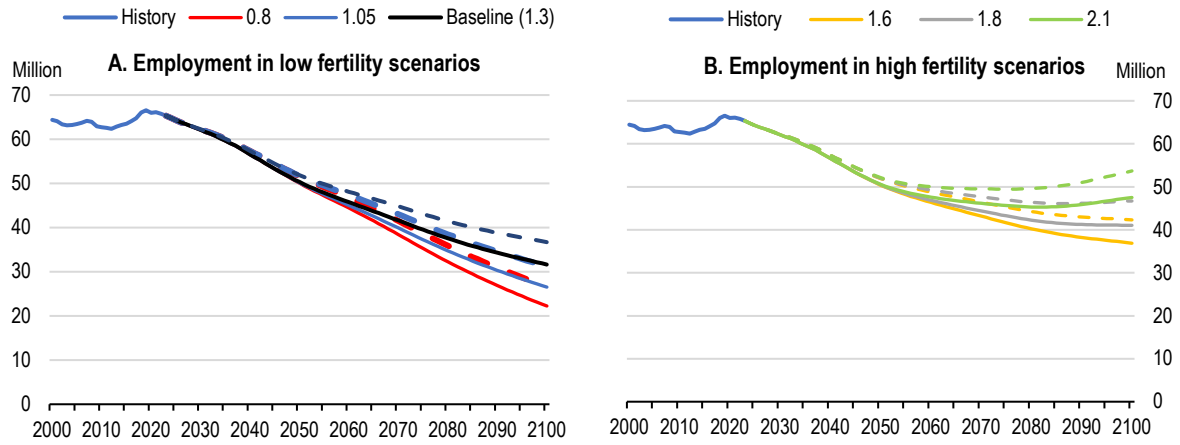


Source: Ministry of Health, Labour and Welfare (2023), *Summary of Notification Status Indicating "Employment Status of Foreigners"*.

Policies to increase the number of foreign workers

The Japanese have a generally positive attitude towards migrant workers, reflecting concerns about the country's shrinking population. In 2022, all of Japan's 47 prefectures, except Tokyo, recorded a population decline. In a 2018 poll in Japan by the Pew Research Centre, 58% responded that Japan should continue to allow the same number of immigrants and 23% favoured an increase. Majorities agreed that immigrants want to adopt Japanese customs (75%) and make Japan stronger thanks to their work and talents (59%) (Pew Research Centre, 2018). Similarly, a 2020 Nikkei Research poll found that 69% agree that an increase in the number of foreigners is good for Japan, with 82% citing their importance as workers (Nikkei Asia, 2020). In 2022, the governors of Gunma and Miyagi prefectures went to Vietnam to recruit workers. Increasing the number of foreign workers would have a significant impact on Japan's labour force. If net immigration doubled from the average of 103 000 per year over 2013-22 to 200 000, Japan's labour force would be between 13% and 20% larger in 2100, depending on the fertility scenario (Figure 37).

Figure 37. The impact of increased net immigration on employment in Japan

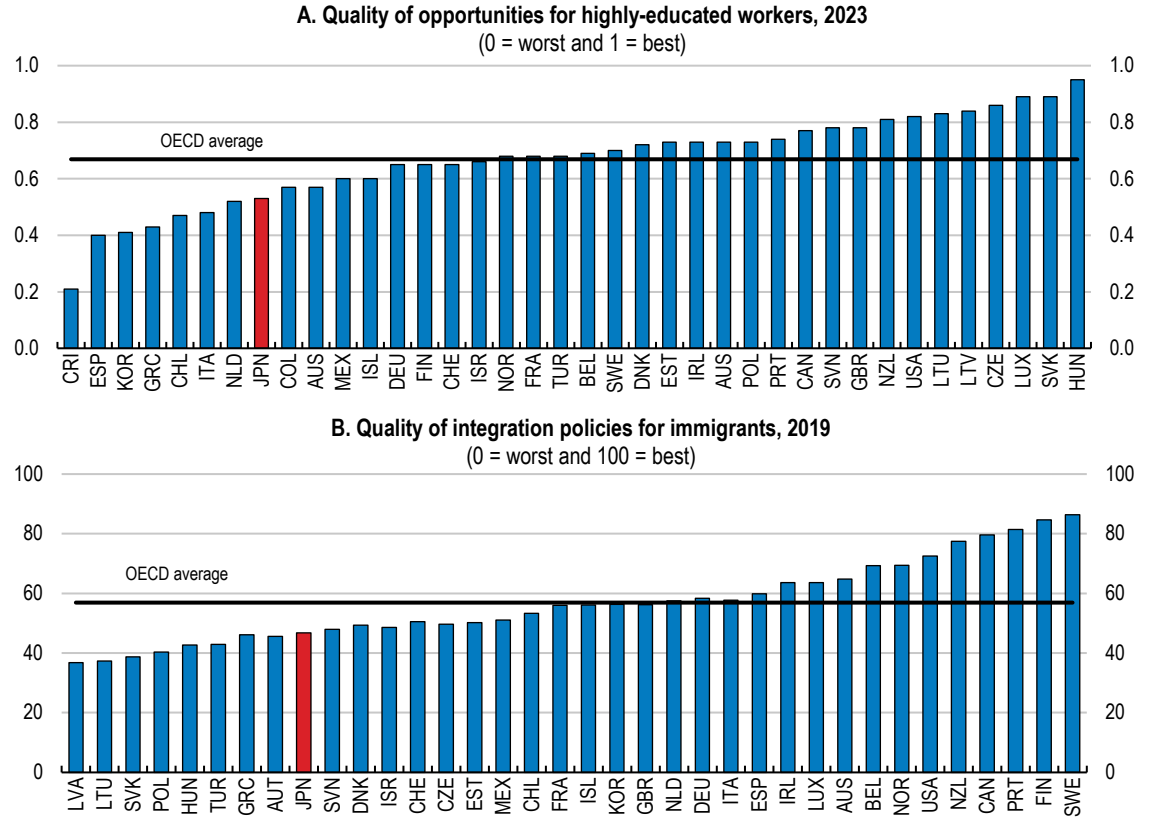


Note: The dotted lines show the impact of increased net immigration on Japan's labour force in each fertility assumption.
Source: OECD calculations based on the OECD Long-term Model.

The contributions of foreign workers depend on their quantity and skills, making it crucial to attract talented individuals. However, Japan faces growing competition from other Asian economies, such as Korea, Taipei, China, and Hong Kong, China, which also face labour shortages. For example, Korea's Employment Permit System, launched in 2004, allows foreign workers to change jobs within the same industry up to three times, and ensures equal pay with their Korean colleagues. The language barrier, lack of social networks, and unfamiliarity with the corporate culture pose challenges to foreign workers in Japan (ADBI-OECD-ILO, 2018). The OECD Indicators of Talent Attractiveness measure the strengths and weaknesses of OECD countries in their capacity to attract and retain migrants. In 2023, Japan ranked only 31st in the quality of opportunities available to highly educated workers (Figure 38, Panel A).

A 2020 study ranked Japan 28th among OECD countries in its policies to integrate migrants, describing Japan's approach as "immigration without integration" (Figure 38, Panel B). Japan ranked lowest in preventing discrimination and 30th in education. A 2017 government study found that nearly 40% of foreign residents had been refused housing during the preceding five years because of their nationality (Centre for Human Rights Education and Training, 2017). Improving Japanese-language instruction for foreign workers and educational opportunities for their children is a priority. Indeed, Japan is the only OECD country where it is not mandatory for school-age foreign children to attend school.

Figure 38. There is room to improve policies to attract and integrate foreign workers



Source: OECD, Migration Statistics database; Migrant Integration Policy Index.

Japan's weakness in integration reflects the fact that such policies started relatively recently with the introduction of the Comprehensive Measures for Acceptance and Coexistence of Foreign Nationals in 2018 (Ministry of Justice, 2018). As highlighted in the *2019 OECD Economic Survey of Japan*, preventing discrimination against migrants and improving access to education and housing are key to improve Japan's ability to attract and integrate migrants. The 2022 "Roadmap for the Realisation of a Society of Harmonious Coexistence with Foreign Nationals" provided a vision of what Japan should aim for and measures to achieve it (Ministry of Justice, 2022). This Roadmap, which includes a goal to "establish environments where foreign nationals can learn the Japanese language skills necessary for daily life and can learn about Japanese customs and social systems", should be used to improve the acceptance of foreign nationals.

Relatively low wages in Japan compared to other advanced economies have also made the country less attractive to potential migrants. The wage level of migrant workers in Japan was 26% below that of native-born workers in 2022, reflecting the importance of seniority-based wages and long-term employment (Korekawa, 2022). The weak yen, which reduces the value of overseas remittances from Japan, has exacerbated this trend. A study by the Japan Centre for Economic Research projects that low wages will make Japan unattractive to migrant workers from China, Vietnam, Indonesia and Thailand, who account for more than half of Japan's foreign workers, by 2032 (Tomiyama et al., 2022). While Japan easily attracted workers from abroad in the past, it now has to actively seek foreign workers. Moreover, higher wages and better working conditions in other countries attract Japanese willing to work abroad. In the Pew Research Centre survey, the share of Japanese who said that emigration of Japanese to work in other countries was a moderate or very big problem rose from 39% in 2002 to 58%, though net emigration remains low or negative (Figure 34).

Specified Skilled Worker Programme and the Technical Intern Training Programme

In April 2019, Japan launched the Specified Skilled Worker Programme, a new residency status for work-ready foreigners with expertise in 14 business lines (now 12 following the merger of some lines) facing labour shortages. This landmark decision allows medium-skilled foreign workers to be employed in Japan on working visas for the first time rather than as trainees, international students and overseas Japanese descendants. The Programme is limited to 345 000 foreign workers over 2019-23. The government has emphasized that the Programme is not a step toward permanent resident status.

The new status has two categories. The Specified Skilled Worker (i) category is for workers "with a considerable degree of knowledge or experience" in the specified industries. This category is open to those who pass proficiency tests in the Japanese language and vocational skills and allows them to stay up to five years in Japan. Japan has signed Memoranda of Cooperation with 16 countries and conducts proficiency tests in 11 of them. However, foreign trainees who complete three years of Technical Intern Training in Japan can change their status to category (i) without taking the exams, giving them up to eight years in Japan, though without their family. The Specified Skilled Worker (ii) category initially applied to those with "expert skills" in only two sectors – construction and shipbuilding (Jones and Seitani, 2019). In June 2023, the government opened the Specified Skilled Workers (ii) category to each of the business lines opened to category (i), except nursing care. Workers in category (ii) may renew their period of stay without restrictions and bring their spouse and children, provided they meet specific legal requirements. Workers in both categories can change employers if they remain in the same industry and must be paid via a verifiable method to reduce the risk of abuse.

By the end of October 2023, Japan had accepted less than 195 000 workers, of which only 29 were in category (ii). The number was 56% of the maximum to be allowed by the end of March 2024, reflecting in part the impact of the COVID-19 pandemic. Only 19% of the total in 2022 arrived in Japan under the Specified Skilled Worker Programme. Most of the remainder were originally trainees in Japan who were accepted into the Programme, making it dependent on the Technical Intern Training Programme. At present, most candidates abroad are unable to meet the skills requirements of the Specified Skilled Worker Programme without prior experience in Japan (OECD, 2024). Vietnam accounted for more than half of the workers in the Programme, followed by Indonesia, the Philippines and China (Figure 39, Panel A). By industry, food and beverage and industrial manufacturing accounted for more than half (Panel B).

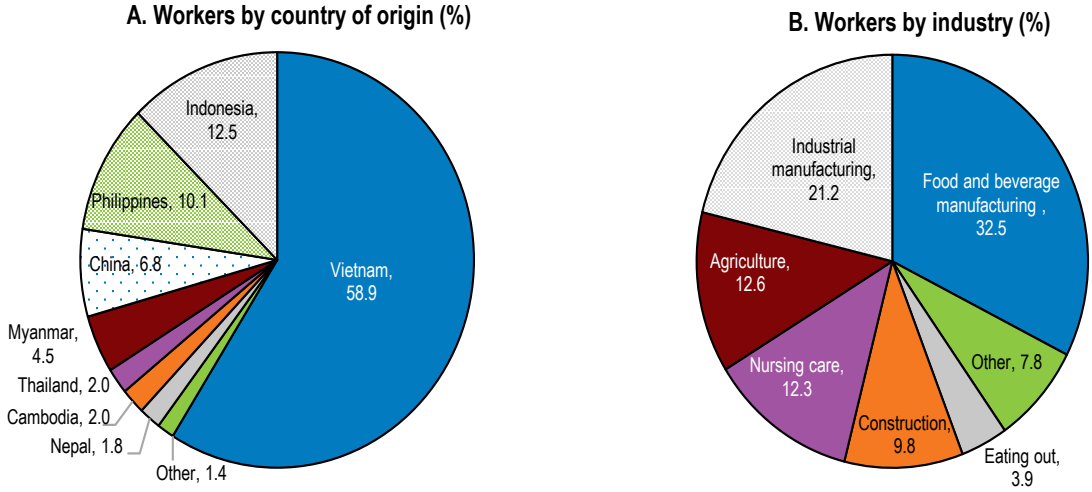
It would be unfortunate if Japan opened its door wider to foreign workers but attracted fewer people than needed or anticipated. The inflows under the Specified Skilled Worker Programme may have been limited by the tarnished reputation of the Technical Intern Training Programme because of human rights issues. The government's advisory panel in November 2023 released its final report, which stated that the authorities should consider reviewing the Programme and creating a new programme that clearly aims not only to develop but to secure human resources. The report outlines the need for workers to be able to change employers, as is the case for the Specified Skilled Worker Programme, to a certain degree. The report also proposes that transfers be allowed in principle for workers who have worked for at least a year at one place and have passed a skills test and the easiest level of the Japanese-Language Proficiency Test. However, transitional measures could be considered on an industry-by-industry basis for the one-year period. It also proposes that those who finish the newly-created programme (after three years) should be able to transfer smoothly to the Specified Skilled Worker Programme (Ministry of Justice, 2023). The report also recommends tightening requirements and oversight of organisations that supervise and support companies accepting foreign workers.

The Japan Federation of Bar Associations has urged the government to abolish the Technical Intern Training Programme by merging it into an expanded Specified Skilled Worker Programme, with more emphasis on category (ii). Offering long-term residency to workers and their families would help attract more and higher-skilled foreign workers. The May 2023 proposals, which would allow trainees to change employers and acknowledges that the aim of the Technical Intern Training Programme is to secure human

resources, would bring it closer into alignment with the Specified Skilled Worker Programme. Given that most foreign workers are unable to achieve the skills requirements of the Specified Skilled Worker Programme without prior experience in Japan, merging the Technical Intern Training Programme into the Specified Skilled Worker Programme would help it achieve its expectations in providing workers. It would also avoid the costs of administering vocational exams across a wide range of industries in 11 countries. Finally, a merger of the two programmes would help remove the stigma attached to the Technical Intern Training Programme based on concerns about the human rights issues noted above.

Figure 39. Foreign workers in the Specified Skilled Worker Programme cover a range of sectors

As of the end of 2022



Note: Industrial manufacturing refers to fabricated materials, industrial machinery, electrical, and information-related manufacturing.
Source: Immigration Services Agency of Japan.

Attracting highly-educated migrants to Japan

Japan's strategy of relying primarily on temporary foreign workers (Korekawa, 2022) to reduce labour shortages is insufficient. Temporary migrants have accounted for around four-fifths of Japan's labour migrants (Table 5). Until 2017, highly-skilled workers had to stay continuously in Japan for five years before being able to apply for permanent residence, a restrictive condition compared to most other OECD countries. To attract more highly qualified experts, the government introduced a points-based scheme in 2012 that provides preferential treatment, based on factors, such as academic background, work experience, research achievements and Japanese language ability, to outstanding foreigners eligible to obtain work status. Japan's points-based scheme grants faster access to permanent residence and favourable conditions for the entry of family members and applies to persons already residing in Japan and new arrivals from abroad (OECD, 2018d). In contrast to Japan's points-based scheme, which is conditional on employment in Japan and initially offers only temporary residence, Australia, Canada and New Zealand select immigrants from a pool of candidates and immediately grant them permanent residence (OECD, 2019a). Japan's point-based system has been primarily used by foreigners already living in the country. Of the 34 700 cases during the past ten years, only 4 500 were immigrants arriving in Japan.

Several factors reduce Japan's ability to attract high-skilled foreign workers. First, the definition of the accompanying family of high-skilled workers and the access of spouses to the labour market is restrictive (OECD, 2024). Second, salaries for new graduates are low under Japan's seniority-based wage system, discouraging young potential immigrants who may not plan to stay in Japan long-term. Third, although

Japan accepts high-skilled migrants, it does not actively try to attract them, unlike some countries (OECD, 2024). A job-matching platform would help attract high-skilled migrants to Japan.

In April 2023, the government announced several initiatives to encourage highly-skilled persons to work in Japan. Graduates of universities ranked in the world's top 100 will be allowed to stay in Japan for up to two years to look for jobs. In addition, a new pathway has been created for highly skilled professionals. Foreigners with an academic background or work experience and an annual income above a certain threshold will be able to gain permanent resident status after staying continuously in Japan for one year. Most applicants for the skilled professional visa are already in Japan on a different work or student visa. In addition to attracting new talent, Japan must help foreigners already in the country advance their careers to reach the income criteria.

Table 5. Temporary migrants account for most of labour migrants to Japan

In thousands

	Permanent migrants	Temporary migrants	Trainees	Sum of temporary and trainees	Total	Share of permanent
2018	66.0	107.7	157.8	265.5	331.5	19.9
2019	82.8	117.5	186.9	304.4	387.2	21.4
2020	56.9	24.9	86.2	111.1	168.0	33.9

Source: OECD (2022), *International Migration Outlook 2022.*

Recommendations to address demographic headwinds

FINDINGS (Main findings in bold)	RECOMMENDATIONS (key recommendations in bold)
Reversing the decline in the fertility rate	
The weak financial position of young people, which has led many to abandon or delay family formation is due in part to seniority wages, which implies young workers are paid less than their productivity.	Move away from seniority-based wages by giving more weight to performance and job category, which would allow Japan to boost productivity and better utilise its human capital.
In 2022, 17% of eligible men took parental leave compared to 80% of women. The government is considering setting a target of 50% by 2025 and 85% by 2030 for men. More than half of men using parental leave in 2021 took less than two weeks.	**Increase the take-up and duration of parental leave by fathers by raising the benefit for all parents and requiring firms to disclose the percentage of their eligible employees who take leave.**
The government plans to significantly increase its budget for child-rearing policies, which include early childhood education and care (ECEC), child allowances and parental leave.	Prioritise spending on early childhood education and care to increase capacity in areas that have waiting lists, ensuring the quality of childcare and overcoming shortages of caregivers.
Japan's relative poverty rate for children aged 17 and under is slightly above the OECD average and the rate for children in single-parent households is the highest in the OECD at 48%. Japan plans to expand its child allowance.	Given the limited impact of child allowances on fertility, focus child allowances on children living in relative poverty.
The most common reason given by couples for not achieving their desired number of children is the cost associated with raising and educating children. Average household spending on private after-school educational institutions (*juku*) for middle-school students was 4.6% to 6.5% of the average wage in FY2021, a significant burden, especially for families with multiple children.	Reduce the role of multiple-choice school entrance exams and give greater weight to other criteria, such as school grades, recommendations and extra-curricular activities in schools, and provide educational support more broadly at a lower cost through after-school programmes, the internet and public broadcasting.
Removing obstacles to the employment of women	
The share of female employees who are non-regular workers has risen sharply over the past 30 years to 55%. The low wages of non-regular workers in Japan's dualistic labour market discourage female employment and contribute to Japan's gender wage gap, while discouraging on-the-job training and slowing productivity growth. Dualism also negatively affects young people and older workers.	**Break down labour market dualism by relaxing employment protection for regular workers and making it more transparent.** **Expand social insurance coverage and training for non-regular workers.**
The social security insurance and tax treatment of second earners reduces female employment and encourages those that do enter the labour force to accept low-paying, non-regular jobs. In addition, this reduces social insurance contributions and tax revenue.	Abolish the exemption from social insurance contributions for second earners making less than JPY 1.06 (or 1.3) million and the tax deduction for main earners if the second earner makes less than JPY 1.5 million.
The time that Japanese men spend on paid labour is the second longest among OECD countries, discouraging employment opportunities for women, who devote around three hours per day more to unpaid labour than men.	Strictly enforce the mandatory limits on overtime hours and require firms to introduce rest time between periods of work. Increase support for SMEs that wish to expand teleworking.
Promoting the employment of older persons	
Japan's traditional labour market practices, such as mandatory retirement and seniority-based wages, are no longer appropriate in the context of rapid ageing. In 2022, 70% of firms set a mandatory retirement age of 60. The link between wages and seniority remains strong.	**Further increase the mandatory retirement age with an aim to abolish it and enforce the equal pay for equal work provision in the *Work Style* reform for all workers.**
Although Japan has the longest life expectancy in the OECD, its pension eligibility age (for the wage-related portion of the Employees' Pension Insurance) is only 64 and 62 for men and women, respectively.	**Raise the pension eligibility age beyond the target of 65 in line with rising life expectancy to strengthen work incentives, increase pension benefits and reduce fiscal costs.**
While around 35% of employees participate in training each year, the share falls to 22% for older employees. Long working hours and the perception that training is not well aligned with skill needs hinders lifelong training.	Use the new professional and vocational universities and junior colleges to provide practical vocational education, including to older persons, in cooperation with industry.
Making greater use of foreign workers	
Japan ranks low in an international ranking of policies to integrate migrants, reflecting the fact that integration efforts are at an early stage.	**Improve Japan's ability to attract foreign workers by implementing a comprehensive strategy to integrate migrants, including by preventing discrimination against them and improving their access to education and housing.**
The 2019 Specified Skilled Worker Programme has attracted slightly more than half of the 345 000 ceiling on workers from abroad between 2019 and the end of October 2023, in part due to the impact of the pandemic. The Technical Intern Training Programme has been troubled by human rights abuses.	Merge the Technical Intern Training Programme with the Specified Skilled Worker Programme and offer long-term residency to more workers and their families.
Japan's points-based scheme for skilled professional visas is conditional on employment in Japan and initially offers only temporary residence. The baseline for permanent residence for all skilled labour migrants is ten years, although recent reforms have reduced it to at least one year. The definition of accompanying family members and the ability of spouses to work is limited.	Select immigrants from a pool of candidates and expand access to permanent residence before ten years. Ease restrictions on the definition of accompanying family and the access of spouses to the labour market.

References

ADBI/OECD/ILO (2018), *Labor Migration in Asia: Increasing the Development Impact of Migration through Finance and Technology*, Asian Development Bank Institute, Tokyo.

Bargu, A. and M. Morgandi (2018), "Can mothers afford to work in Poland: Labor supply incentives of social benefits and childcare costs", *Policy Research Working Papers*, No. 8295.

Becker, G. (1960), "An economic analysis of fertility", in G. Becker (ed), *Demographic and Economic Change in Developed Countries: A Conference of the Universities*, Princeton: Princeton University.

Bergsvik, J., A. Fauske and R. Hart (2021), "Can policies stall the fertility fall? A systematic review of the (quasi-) experimental literature", *Population and Development Review*, Vol. 47/4.

Bioedge (2018), "Will IVF turn around Japan's declining population?", 9 June.

Cabinet Office (2023), *Survey on Attitudes and Lifestyles of Children and Young People (FY Reiwa 4)* (in Japanese).

Cabinet Office (2022), *Annual Report on the Declining Birth Rate 2022 (Summary)*.

Cabinet Office (2021), *FY2020 International Survey on Awareness of the Declining Birth Rate Society*.

Cabinet Office (2019), *Survey on Awareness of Measures for a Declining Birth Rate Society,* Annual Report on the Declining Birthrate 2019 (Summary).

Cabinet Secretariat (2023a), *Strengthening Policies for Children and Child-rearing (tentative proposal): Toward the Realization of Measures to Address the Declining Birth Rate in Different Dimensions*, 31 March (in Japanese).

Cabinet Secretariat (2023b), *Strengthening Polices for Children and Child-rearing (tentative proposal): References* (in Japanese).

Centre for Human Rights Education and Training (2017), *Analytical Report of the Foreign Residents Survey*, revised edition, report commissioned by the Ministry of Justice.

Children's Future Strategy Council (2023), *Draft Strategy for Children's Future* (in Japanese).

Christensen, K. et al. (2009), "Ageing populations: the challenges ahead", *Lancet*, Vol. 374.

Clark, R. and N. Ogawa (1992), "The effect of mandatory retirement on earnings profiles in Japan", *Industrial and Labour Relations Review*, Vol. 45, No. 2.

Doepke, M. et al. (2022), "The economics of fertility: A new era", *National Bureau of Economic Research Working Papers*, No. 29948.

Fukai, T. (2017), "Childcare availability and fertility: Evidence from municipalities in Japan", *Journal of the Japanese and International Economies*, Vol. 43.

Fukuda, T. et al. (2022), "Research on understanding the effects of free early childhood education and care", Japan Research Institute, 14 April (in Japanese).

Geppert, C. et al. (2019), "Labour supply of older people in advanced economies: The impact of changes to statutory retirement ages", *OECD Economics Department Working Papers*, No. 1554.

Gordon, A. (2017), "New and enduring dual structures of employment in Japan: The rise of non-regular labour, 1980s–2010s", *Social Science Japan Journal*, Vol. 20, Issue 1.

Government of Japan (2023a), *Basic Policy on Economic and Fiscal Management and Reform 2023* (in Japanese).

Government of Japan (2023b), *Direction for the Strategy for Children's Future* (in Japanese).

Government of Japan (2023c), *General Principles for Child-related Measures* (in Japanese).

Gratton, L. and A. Scott (2017), *The 100-Year Life*, Bloomsbury Information, London.

Hara, H. (2019), "The gender wage gap across the wage distribution in Japan: Within- and between-establishment effects", *Labour Economics*, Vol. 53.

International Federation of Robotics (2021), *Robot Density Nearly Doubled Globally*, 14 December.

IPSS (2022), *Sixteenth Basic Survey on Fertility Trends: Summary of Results*, National Institute of Population and Social Security Research, Tokyo (in Japanese).

JCCI (2023), *Results of the Survey on Minimum Wage and Wages and Employment of Small and Medium-sized Enterprises*, Japanese Chamber of Industry and Commerce, March (in Japanese).

JETRO (2016), *Investing in Japan*, Tokyo.

JICA (2022), *A Survey/Research Report on Efforts to Realise a Symbiotic Society with Foreigners by 2030/40*, Japan International Cooperation Agency.

JILPT (2020a), "Survey on employment and living of persons in their sixties", *JILPT Research Series*, Japan Institute for Labour Policy and Training, No.199 (in Japanese).

JILPT (2020b), "Survey on the employment of older persons", *JILPT Research Series*, Japan Institute for Labour Policy and Training, No. 198 (in Japanese).

Jones, R. (2022), *The Japanese Economy: Strategies to Cope with a Shrinking and Ageing Population*, London: Routledge Press.

Jones, R. and H. Seitani (2019), "Meeting fiscal challenges in Japan's rapidly ageing society", *OECD Economics Department Working Papers*, No. 1569, OECD Publishing, Paris.

Kakuchi, S. (2020), "Record numbers of female students, but is it enough?", *University World News*, 7 November.

Kato, T., H. Ogawa and H. Owan (2016), "Working hours, promotion and gender gaps in the workplace", *RIETI Discussion Paper Series,* No. 16-E-060.

Kato, H. (2018), "The analysis on disparities of fertility rate of Japanese municipalities", *Policy Research Institute*, Ministry of Finance Japan, Vol. 14.

Kikuzawa, S. and R. Uemura (2020), "Parental caregiving and employment among midlife women in Japan", *Research on Aging*, Vol. 43.

Kimura, H. (2018), *Data-based Discussion on Education and Children in Japan 2: Analysing Juku – Another School After School*, Child Research Net.

Kitao, S. and M. Mikoshiba (2022), "Why women work the way they do in Japan: Roles of fiscal policies", *RIETI Discussion Paper Series*, No. 22-E-016, Tokyo.

Kitao, S. and M. Mikoshiba (2020), "Females, the elderly, and also males: Demographic aging and macroeconomy in Japan", *Journal of Japan and International Economies*, Vol. 56, June.

Kitao, S. and T. Yamada (2019), "Dimensions of inequality in Japan: Distribution of earnings, income and wealth between 1984 and 2014", *RIETI Discussion Paper Series*, No. 19-E-034, Tokyo.

Kojima, S. et al. (2017), "Abe Shinzō's campaign to reform the Japanese way of work," *The Asia-Pacific Journal*, Vol. 15, Issues 23, No. 3.

Korekawa, Y. (2022), *What Does Matter? Beyond Cultural Explanations of Immigrant Society of Japan*, Center for Japanese Studies, University of California Berkeley.

MEXT (2022a), *Regarding the Status of Utilisation of Closed Public Elementary and Middle School Facilities and Surplus Classrooms in FY2021*, Ministry of Education, Culture, Sports, Science and Technology (in Japanese).

MEXT (2022b), *FY2021 Children's Study Expense Survey,* Ministry of Education, Culture, Sports, Science and Technology (in Japanese).

MHLW (2023a), *General Survey on Working Conditions,* Ministry of Health, Labour and Welfare (in Japanese).

MHLW (2023b), *Summary of Notification Status Indicating "Employment Status of Foreigners*, Ministry of Health, Labour and Welfare, October (in Japanese).

MHLW (2022), *2022 Survey on Employment Conditions of Elderly Persons*, Ministry of Health, Labour and Welfare (in Japanese).

MHLW (2018), *The Situation of Supervision Guidance, Inspections, etc. of Trainers of Foreign Technical Intern Trainees in 2017*, Ministry of Health, Labour and Welfare, Tokyo (in Japanese).

Migrant Integration Policy Index (2020), *Migrant Integration Policy Index*.

Ministry of Justice (2023), *Final Report* (in Japanese).

Ministry of Justice (2022), *Roadmap for the Realization of a Society of Harmonious Coexistence with Foreign Nationals* (in Japanese).

Ministry of Justice (2018), *Comprehensive Measures for Acceptance and Coexistence of Foreign Nationals* (in Japanese).

Miyamoto, H. (2016), "Reforming Japan's dual labour market", *East Asia Forum*, 23 December.

Morikawa, M. (2018), "Hidden inflation: Japan's labour shortage and the erosion of the quality of services", *VoxEU.org*, 31 March.

Naito, J. (2016), "The self-fulfilling prophecy in statistical gender discrimination: Its basic mechanism and the effects of diversity policies", *Sociological Theory and Methods*, Vol. 30, No. 1.

Nihon Keizai Shimbun (2021), "Childcare Vacancies in Rural Areas Increased in 2021 and the Number of New Users Fell Below the Previous Year for the First Time", 12 December.

Nikkei Asia (2020), "Nearly 70% of Japanese Say More Foreigners are 'Good': Survey", 10 January.

Nippon.com (2022), "Japan Sees 90% Drop in Daycare Waiting Lists over the Last Five Years", 14 September.

OECD (2024), *Recruiting Immigrant Workers: Japan,* OECD Publishing, Paris (forthcoming).

OECD (2023a), *Exploring Norway's Fertility, Work and Family Policy Trends,* OECD Publishing, Paris.

OECD (2023b), "Fertility, employment, and family policy: A cross-country panel analysis", *OECD Social, Employment and Migration Working Papers,* No. 299.

OECD (2023c), *OECD Science, Technology and Innovation Scoreboard* (webpage), Paris.

OECD (2022), *International Migration Outlook,* OECD Publishing, Paris.

OECD (2021a), *Government at a Glance 2021*, OECD Publishing, Paris.

OECD (2021b), *Pensions at a Glance 2021*, OECD Publishing, Paris.

OECD (2021c), *Creating Responsive Adult Learning Opportunities in Japan, Getting Skills Right*, OECD Publishing, Paris.

OECD (2019a), *OECD Economic Survey of Japan 2019*, OECD Publishing, Paris.

OECD (2019b), *How Future-ready is Japan's Adult Learning System?*, OECD Publishing, Paris.

OECD (2018a), *Working Better with Age: Japan*, Ageing and Employment Policies, OECD Publishing, Paris.

OECD (2018b), *Recommendation of the Council on Ageing and Employment Policies*, Paris.

OECD (2018c), *Education Policy in Japan: Building Bridges towards 2030*, OECD Publishing, Paris.

OECD (2018d), *International Migration Outlook*, OECD Publishing, Paris.

OECD (2017), *OECD Economic Survey of Japan 2017*, OECD Publishing, Paris.

OECD (2016a), "Parental leave: Where are the fathers? Men's uptake of parental leave is rising but still low", *Policy Brief*, OECD Publishing, Paris.

OECD (2016b), *International Migration Outlook,* OECD Publishing, Paris.

OECD (2015), *OECD Economic Survey of Japan 2015*, OECD Publishing, Paris.

OECD (2011), *OECD Economic Survey of Japan 2011*, OECD Publishing, Paris.

Okamoto, Y. et al. (2019), "Investigative research on declining birthrate policies in local communities", *Journal for Regional Policy Studies*, No. 11 (in Japanese).

Oshio, T. (2019), "Is a positive association between female employment and fertility still spurious in developed countries?", *Demographic Research*, Vol. 41, pp. 1277-1288.

Oshio, T., E. Usui and S. Shimizutani (2019), "Labour force participation of the elderly in Japan", in *Social Security Programs and Retirement around the World: Working Longer*, in C. Coile, K. Milligan and D. Wise (eds), University of Chicago Press.

Pew Research Centre (2018), *Japanese Views on Immigrants, Immigration, Emigration*, 12 November.

Prime Minister's Office of Japan (2023a), *Policy Speech by Prime Minister Kishida Fumio to the 211th Session of the Diet*.

Prime Minister's Office of Japan (2023b), *Press Conference by Prime Minister Kishida.*

Recruit Works Institute (2023), *Works Report 2023* (in Japanese).

Sony Life Insurance (2020), *2020 Survey on Educational Spending on Children*.

Tajan, N. et al. (2017), "Hikikomori: The Japanese Cabinet Office's 2016 survey of acute social withdrawal", *The Asia-Pacific Journal*, Vol. 15.

The Guardian (2023), "Baby Boomtown: Does Nagi Hold the Secret to Repopulating Japan?", 28 May.

Thévenon, O. (2016), "The influence of family policies on fertility in France: Lessons from the past and prospects for the future", in R. Rindfuss and M. Choe (eds), *Low Fertility, Institutions, and Their Policies,* Springer, Cham.

Thomas, A. and P. O'Reilly (2016), "The impact of tax and benefit systems on the workforce participation incentives of women," *OECD Taxation Working Papers*, No. 29.

Tomiyama, A. et al. (2023), "Dekasegi to Japan peak out by 2032 ~Local salary hikes and a weaker Yen will diminish the benefits", *Japan Centre for Economic Research* (in Japanese).

Usui, E., S. Shimizutani and T. Oshio (2017), "Health capacity to work at older age: Evidence from Japan", *Social Security Programs and Retirement Around the World: The Capacity to Work at Older Ages*, editor D. Wise, University of Chicago Press.

Usui, E., S. Shimizutani and T. Oshio (2016), "Are Japanese men of pensionable age underemployed or overemployed?", *Japanese Economic Review*, Vol. 67(2).

WHO (2020), *Healthy Life Expectancy (HALE) at Age 60 (years)* and *Healthy Life Expectancy (HALE) at Birth (years)*, World Health Organisation.

World Economic Forum (2023), *Global Gender Gap Report 2023*.

Yamaguchi, K. (2016), "Determinants of the gender gap in the proportion of managers among white-collar regular workers in Japan", *Japan Labour Review*, Vol. 13, No. 3.

Yamaguchi, S. (2021), *The Economics of Child-rearing Support,* Nihon Hyoronsha (in Japanese).

Yashiro, N. (2018), "Dismissal compensation and labour mobility in Japan", *Severance Payment and Labour Mobility*, edited by T. Hatta and S. Ouchi, Springer.

Yokoyama, I. (2018), "How the tax reform on the special exemption for spouses affected the work-hour distribution", *Journal of the Japanese and International Economies*, Vol. 49.

Youm, Y. and K. Yamaguchi (2016), "Gender gaps in Japan and Korea: A comparative study on the rates of promotion", *RIETI Discussion Paper Series*, No. 16-E-011.