
Labor Shortage Trends of East Asia:

A Comparison Between Japan and China

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ABSTRACT

The current labor shortage in China echoes a historical trend from the 1980s, first observed in Japan. A decline in fertility rates after the 1970s led to a gradual reduction in the available working population in Japan, resulting in a decrease in the overall labor force from 2000 onwards. The Japanese labor shortage has returned as Japanese workers face high workplace pressures and employers opt to maximize productivity with existing staff rather than recruiting or increasing wages. This approach has indirectly intensified pressure on employees, leading to self-isolation and widespread workplace discrimination against women. Such conditions have hindered the expansion of the labor supply. The shared socioeconomic backdrop of labor shortages extends to other East Asian communities, where an unwelcoming workplace atmosphere has discouraged the younger generation from participating in the labor force. Many have chosen to withdraw voluntarily, maintaining a basic standard of living despite lacking sources of income. This trend, compounded by a reluctance to enter marriages and the financial challenges of raising children, further contributes to declining fertility rates in the region's future.

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INTRODUCTION

China's current labor shortage is a direct result of the low fertility rates contributed by the family plan in the past decades, in combination with regional disparities and the Household Registration (Hukou) System, which restricted internal migrations within the country (Cui et al. 2018, 1217-1238). Recent economic recessions, lockdowns, and travel restrictions due to zero-Covid policies have increased barriers to labor market supply as the disrupted economy and excessive administrative interference have decreased job opportunities. High pressure in the workplace, comparatively low wages, long working hours, and broad age discrimination have resulted in the decline of an incoming labor force actively seeking employment, otherwise known as the wave of "lie flat" (McMorrow and Liu, 2022). The evidence-backed consensus among experts is that the supply in China's labor market is far below what it used to be (Masui et al. 2021).

Decades before China's decreased labor supply, Japan experienced numerous similarities during its labor shortage, including low fertility rates and regional disparities in economic development. These issues are common across East Asian countries. They can be partly responsible for the Japanese social problems of hikikomori (Kato et al. 2019, 427-440), where members of the younger generation become isolated in society and thus exclude themselves from the labor supply (Kato et al., Kanba, and Teo, 2019, 427-440; Vogel 2018, 257-292).

This article discusses the contribution of workplace pressures to the Chinese labor shortage and whether the economic recession, zero-COVID policies, and relatively low wage standards may affect the public's willingness to seek employment. It also compares the labor shortage in China that emerged in 2020 with the labor market deficit in Japan since 2000 to identify the origins of these issues concerning the demographics, social backgrounds, and differences in the policies in each country.

DEMOGRAPHIC TRANSITION

The reduction of China's working population is an unintended consequence of the "one-child policy" in the late 1970s—a compulsory family plan restricting each family to only one child. The plan's goal was to gradually reduce China's population, which had reached a height of 822 million, and the plan was successful in doing so. However, the policy also reduced the labor force, which has become a problem for China, as the country has faced a decline in the working-age population since 2010. The number of working people between ages 15 and 59 fell from 925 million to 894 million in 2020, and the percentage of the working population dropped from 70% in 2011 to 63% in 2021, marking a proportional working-age population decrease (McDonald and Zhu 2021).

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An additional contributor to the labor shortage in China is regional development disparities. Higher levels of development in urban areas have attracted migrant workers to move from rural areas to cities, where they can find better-paying jobs. Similarly, the economic difference between the East's coastal metropolitan areas and the West's inland areas has driven people to migrate from the rural West to the developed, flourishing East to seek better economic opportunities. However, recent industrial growth in the inland area suggests its developments are catching up to the coastal areas, which may halt or slow this migration from the East. Thanks to several initiatives by the central government to promote industrial development in Western China, the number of jobs inland has grown rapidly. Due to the increase in labor demands in the coastal areas, opportunities are not as lucrative as they used to be as stimulus policies encourage businesses to transfer labor-intensive industries to the Western provinces (Cui et al. 2018, 1217-1238).

Japan is similarly struggling with low fertility rates. Though not as strict as China's one-child Policy, Japan launched its family planning project in the late 1940s. Through successful campaigns calling for population controls, the policy reduced the fertility rate from 4.5 children per woman after WWII to 2 in 1949. Reproduction rates in Japan remained at this level until the 1970s, when the country experienced a gradual decline in the fertility rate (Lu and Miyasaka 1978, 174-182). Today, the fertility rate is 1.3 (World Bank 2022). With an insufficient supply of new young workers to replace retirees, the labor force in Japan faced an inevitable decline. The workforce dropped from 67.66 million in 2000 to 65.65 million in 2013. Compared to China, a lower percentage of Japanese women are able to be recruited in the job market, leading businesses to seek female workers to fill the labor shortage. The employment rate of Japanese women rose from 47% to 53.6% between 2014 and 2023 (Statista 2024).

While regional disparities in Japan are not as significant as those in China, differences in levels of development among localities have similarly impacted the labor supply. Despite the Japanese government's attempts to reduce regional disparities, Tokyo's rampant growth has over-concentrated the population and industries in the Tokyo metropolitan area, leading to a rise in unemployment in non-metropolitan areas (Han 2010). Tokyo's hyper-development has attracted laborers to the Tokyo municipal areas, leaving non-workable populations in the localities and exaggerating labor shortages there. The lack of labor supply outside the metropolitan area has, in turn, triggered businesses to cluster away from less-populated municipalities (Masui et al. 2021). These regional disparities have thus perpetuated a cycle of unemployment and labor shortages to continue outside Japan's metropolitan areas.

Ultimately, the main reason for the shrinkage of the workforce in China and Japan is the decline in the fertility rate that emerged in the 2010s and 1970s,

respectively. To some extent, these declines in fertility rates are due to regulations on population growth. However, the dominant factor contributing to the drastic decline in working forces is the lack of will to reproduce in both countries (Yang et al. 2022).

SOCIOCULTURAL TRANSFORMATION AFFECTS LABOR SUPPLY

The labor shortage was not only a consequence of the decline in working-age populations. A lack of willingness to seek employment has affected the labor markets in China and Japan. Moreover, enthusiasm for working has declined as modern and traditional ideas of employment have conflicted.

The reluctance to seek employment has become commonplace in China. One factor is the high-pressure environment commonly found in the workplace. Chinese workers must regularly work overtime without pay, regardless of occupation or sector. The iconic “996” schedule represents the norms of long working hours in which office staff are assigned to work twelve hours a day, from 9 a.m. to 9 p.m., six days per week (Bao 2022). Many laborers can only passively express their desperation, and their willingness to work is negatively affected by collusion between the bureaucracy and the businesses that prohibit workers from expressing their dissatisfaction (Mulimaimaiti 2022).

Beyond their long working hours, Chinese workers suffer from veiled age discrimination. Employers in China often establish 35-year-old age restrictions for job candidates, forcing workers older than 35 to leave the workforce and face further exclusion from the job market (Mulimaimaiti 2022). The “35-year-old curse” has spread to all sectors, further increasing the unemployment rate in China by alienating large portions of the already-limited labor force (Yuan 2023).

Businesses prefer younger workers because they can be paid lower salaries due to their lack of experience. These younger workers in turn have no desire for lower wages, thus decreasing the incentive to work. The “traditional” employee in Asia is considered ready to devote themselves to the betterment of the business while seldom thinking about their interests, as they believe their personal fate is tied to the destiny of the business. Younger generations of Chinese workers have begun to reject such stereotypes. Unlike the previous generation, these new workers seek comprehensive benefits, better working conditions, flexibility, and work-life balance, in addition to better wages at higher levels (Masui et al. 2021).

Businesses’ wage standards are also unattractive to young migrant workers. Although still higher than those in workers’ hometowns, standard wages can barely cover the cost of living in the cities where jobs are located. Occupations

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with higher pay are also unattractive to these workers due to their high-pressure environments and long working hours (Masui et al. 2021).

As a result of the economic disorder caused by the COVID-19 pandemic lockdown, the employment data is not positive. The employment rate of new graduates from colleges in China is only 20%, indicating that thousands of students will join the unemployed group immediately after graduation (Steil and Harding 2023). To avoid the high workplace pressure of long working hours, low wage levels, and discrimination, a considerable number of young Chinese workers have “rotten,” or are now deliberately not seeking employment nor striving for an excellent work ethic by only completing their work to a minimum (Bao 2022; McMorro and Liu 2022).

The lack of willingness to be employed is not a social issue unique to China. Institutionalized overtime hours and verbal explosions from the superior are conventional in Japan, and despite the labor shortage, employees' status has not improved in the workplace (Statista 2024). Research by Japan's Ministry of Finance reveals that Japanese businesses tend not to raise wage standards, even when they are experiencing deficits in workers. On the contrary, these businesses are fond of “strengthening human resources development” (Masui et al. 2021). Businesses have rejected the choice to raise wages, instead deciding to maximize the productivity of current workers. This may result in even higher pressures and increased mental health issues in the workplace.

Young workers in Japan, like those in China, are more likely to reject this negative workplace atmosphere. When the new generation felt the conventional high-pressure environment was intolerable, they simply refused to seek employment. They engaged in hikikomori, a practice in which people refuse to comply with the set norms by locking themselves in rooms and eliminating engagement in all outdoor activities, especially when seeking recruitment in the job market (Kato et al. 2019, 427-440).

The complex nature of workplace practices that may be impacting labor supply can be linked to social issues in China and Japan, such as a mix of cultural conventions, economic development, and demographic changes. Traditionally, workplaces in Asia have operated within bureaucratic structures characterized by a hierarchical culture. Although this structure has led to high workplace pressure, workers have typically been appeased by compensation and benefits, which mitigate the frustrations associated with a demanding work environment. While traditional employees in Asia are expected to fully commit to the company's interests, often at the expense of their own, the newest generation of Asian workers is increasingly rejecting these demands. Contributing factors include the rise of new technologies, which domestic industries have overlooked, known as industrial transfer, leading to fewer abundant and lucrative opportunities for young workers, and subsequently

diminishing their interest in offered wages. Moreover, younger generations prioritize comprehensive benefits beyond just increased wages from promotions, seeking safe working conditions, flexible schedules, and work-life balance (Bandurski 2021). The expectation to work relentlessly after age 35, with only modest salaries to show for it, understandably diminishes the desire to work.

GOVERNMENT INTERFERENCES

The Household Registration (Hukou) System, although no longer as significant as it once was, still affects China's labor supply. Administrations of large cities set socioeconomic maximum quotas for migrants moving to new localities, including by income, education level, and real estate purchases (Cui et al. 2018, 1217-1238). Many young office workers, though permitted to work, cannot enjoy full public services in their workplaces as a result of the cutoffs, which force them to leave their positions reluctantly.

The Hukou System still affects China's economic routine. The abrupt shutdown of transportation, massive lockdowns to prevent migration, and other restrictive policies have further inconvenienced migrant workers, who are confused about whether to stay in their hometowns or leave for better opportunities.

China's government has also directly interfered with the economy. In 2021, the lucrative education industry in China was wrecked by the administration's policies through a ban on any for-profit tutoring services, nearly eliminating the industry. Accompanied by the loss of about \$100 billion, the crackdown on the education industry has caused a drastic wave of unemployment (Yang 2021, 109-119).

In contrast, having experienced a shortage in labor supply for decades, Japan has become experienced in solving this issue. One solution Japan employs is the introduction of immigrant workers. From 2014 to 2021, the total amount of immigrant workers in Japan increased from 682,000 to 1.73 million. Japan has received a considerable number amount of immigration workers from the Philippines. (Ball et al. 2002). While immigration has successfully augmented Japan's labor market, the process of introducing immigrant workers to Japan does have challenges.

Despite Japan's reliance on these immigrant workers for its economy, the government has aimed to limit the return of these workers to their home countries after short periods, despite most of those workers being the kind of skilled laborers the country needed. The Japanese government has maintained its regulations on immigrant labor, delegating most protections and welfare responsibilities for migrant workers to the local level. However, due to the lack of transparency and clarity in this arrangement, efforts to prevent the

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physical and psychological exploitation of Filipino migrant workers have been ineffective (Ball and Piper 2002).

Since the issue of labor shortages in Japan emerged twenty years ago, the Japanese government has become more sophisticated in coping with the labor supply shortage. Even though hosting immigrant workers to fill the gaps in the domestic labor supply may be controversial in such a conservative society, and the official policy goal neglected the protection and welfare of immigrant laborers, introducing foreign laborers to Japan has proven to be a successful policy. The total workforce in Japan has stopped declining since 2013, and the labor force reached its historical peak of more than 67 million around 2017. This number has been maintained steadily until now (Statista 2024). Generally, Japan's pragmatic policy has eased labor shortage problems. If Chinese authorities adjust their policy goals to address the deficit in labor supply, the labor shortage in China may not be further intensified. However, the political economy in China may be an obstacle to moving forward.

SIMILARITIES AND DIFFERENCES TO OTHER WORLD REGIONS

After four decades of abundant labor supply, the era of China's labor surplus has officially ended (Cui et al. 2018, 1217-1238). China's labor shortage was caused by its population structure, economic recessions, and restrictive policies. The social issues of China's high workplace pressure, long working hours, and discrimination targeting workers above 35 years old have discouraged many citizens from actively seeking employment.

The shared socio-economic background of labor shortages in China and Japan is commonplace in other East Asian communities. The unfriendly atmosphere in workplaces has become undesirable and intolerable for younger generation, many of whom have voluntarily excluded themselves from the labor supply and managed to maintain a minimum standard of living across Asia. Lacking sources of income, these young generations are not financially eligible to foster children nor willing to marry, further decreasing fertility rates in the future. The fertility rate in South Korea has dropped to 0.8 children per woman, and the annual deaths in Taiwan's population have officially surpassed the number of annual new births. Predictably, the labor shortages in East Asia will be exaggerated (Vogel et al. 2018).

The results of the demographic transitions of China and Japan have echoed the similar trend of fertility rates in other high-income industrializing countries. Immigration has become a significant source of labor in those countries, further justifying Japan's introduction of immigrant workers as an important means of supplementing the domestic labor supply. The policies of other industrialized countries might be helpful for countries to look to as they solve their labor

supply issues, such as by institutionalized regulations to protect the human rights and welfare of immigrant workers and eliminate discrimination in the workplace.

CHALLENGES OF CHINA

To some extent, China is already adopting some of Japan's previous practices. The government has also tried to combat the trend of unwillingness to work directly through propaganda. Media campaigns calling for "realizing oneself through dedication" have been commonplace since 2021; however, they have only exacerbated this dissatisfaction in Chinese society (Bandurski 2021). In March 2023, official Chinese media published articles criticizing the "Kong Yiji Literature," comparing young college graduates with this fictional character who was not "endeavorous" and criticizing college graduates who declined to take jobs not "prestigious enough" (Methven 2023). Such narratives were ineffective because they understated the difficulties of employment and the financial burdens of the public during the economic slowdown since the COVID-19 pandemic. The public raised further criticisms of the Kong Yiji rhetoric being used by the state media, as the government showed no intention of assisting those suffering from unemployment (Steil and Harding 2023). Beijing is reluctant to ease its controls on the economy, and it has yet to reinstate or create new jobs to accommodate the unemployed young graduates. The industrial shutdown during the pandemic threatened jobs in service sectors where many of the younger generation found employment. China's policies, unsurprisingly, thwarted young people's efforts to secure their jobs, as the focus remained on neutralizing the influences of private sectors (Zhang and Woo 2023).

Contrary to its preference for state intervention, China's rejection of the welfare system has doomed its effectiveness in economic recovery, which only worsens the labor shortage. China's fear that welfarists are adversaries of society has pushed Beijing to be more cautious as it invests in the people's livelihoods (Thomas 2023). The shrinkage in income and rising expenditures forced local governments—the direct providers—to cut their budgets for social welfare (Bradsher 2023). Cuts in government spending are exacerbating the public's anxiety about job insecurity and are causing more new graduates to apply for government jobs that are comparably more stable. (Batista 2022) For those who did not survive the fierce competition between a record-high number of applicants to the civil service systems, the only option is to find breadwinning jobs and survive being "laid down" (Baptista 2022).

POLICY RECOMMENDATION

China is at a critical juncture in addressing its labor shortage crisis. By adopting elements of Japan's immigration policy and combining them with comprehensive

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vocational training, workplace reforms, and improved social welfare programs, China can alleviate its current labor market challenges. However, unlike Japan, which has faced resistance to workplace reforms, China has the opportunity to build a more flexible, inclusive labor market that appeals to its younger generation (Masui et al. 2021). In doing so, China can ensure a sustainable workforce and a more robust economic future for the coming decades.

China should also prioritize the development of vocational training and upskilling programs to address labor shortages in specific sectors. With many of China's young workers disengaged from the labor market due to workplace pressures and low wages, vocational education can provide alternative pathways for employment, especially in fields requiring technical skills (McMorrow and Liu 2022). Programs should be designed to appeal to younger generations, focusing on sectors such as green technology, digital innovation, and manufacturing automation, which are central to China's future economic growth. Additionally, collaborations between the government, businesses, and educational institutions can create practical training opportunities that align with industry needs, providing young people with skills and certifications that increase their employability.

One of the most pressing issues in China is the high-pressure, hierarchical workplace culture that is deterring younger generations from entering the labor market (McMorrow and Liu 2022). Japan has made some attempts to address workplace stress, but traditional hierarchical systems and long working hours persist in many industries. China must go further by implementing reforms that emphasize work-life balance, mental health support, and more flexible work arrangements. Labor laws should be enforced to limit the expectation of overtime, and companies should be incentivized to offer competitive wages, comprehensive benefits, and clear career progression opportunities. Introducing policies to protect workers from age discrimination, such as enforcing anti-discrimination laws and offering retraining programs for older workers, would also reduce the barriers to employment faced by those above age 35. Unlike Japan, where traditional hierarchies remain dominant, China has an opportunity to leapfrog past outdated workplace structures by creating more inclusive and flexible work environments that appeal to younger generations.

Japan has struggled with welfare provisions for migrant workers and young people facing unemployment. China, too, should address gaps in its social safety net, which currently leaves many young workers vulnerable to economic instability (Bradsher, 2023). Expanding unemployment benefits, healthcare, and affordable housing options would not only provide a cushion for the unemployed but also encourage young workers to pursue jobs without fear of financial ruin. Strengthening the social welfare system can reduce the "lie flat" mentality by alleviating some of the financial stress that drives young workers to withdraw from the labor market. By investing in this safety net, China can

support both its existing workforce and new generations of workers who may be hesitant to enter an unstable labor market.

CONCLUSION

Japan has faced a prolonged labor shortage, driven by demographic decline and socio-economic pressures. To address this, Japan has employed several strategies, most notably increasing immigration, introducing policies to attract foreign workers, and focusing on upskilling its domestic workforce through vocational training programs. Additionally, Japan has worked to strengthen its labor market by emphasizing productivity over wage increases, though this approach has not been without challenges, particularly regarding the well-being of immigrant workers and the strain on existing employees. Despite these hurdles, Japan has managed to stabilize its labor force and keep its economy functioning by relying on immigration as a supplementary labor source, while simultaneously fostering a more skilled workforce.

China, facing similar demographic challenges and a shrinking labor force, should look to Japan's experience as a model for addressing its labor shortage. China can adopt Japan's approach by expanding its immigration policies to attract skilled workers, particularly in sectors such as technology and healthcare, where there are significant gaps. At the same time, China should invest in vocational training and upskilling programs to help its younger workforce find sustainable, well-compensated employment opportunities. However, unlike Japan, China must also take more immediate steps to reform its workplace culture, focusing on improving work-life balance and combating age discrimination, which are major deterrents for young workers. By combining immigration, vocational training, and cultural reforms, China can follow Japan's example, but with adaptations that address the unique challenges of its labor market. In doing so, China can build a more resilient workforce and ensure that its economy remains competitive in the face of demographic decline.

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