

Japan Watch

How tight is Japan's labor market, really?

Mixed messages on labor market tightness

The extent of tightness in Japan's labor markets is one of the most important themes in forecasting the outlook for Japan's economy, inflation, and Bank of Japan (BoJ) policy. However, it is difficult to measure directly.

The active job openings-to-applicants ratio, which is compiled by the Ministry of Health Labor and Welfare (MHLW) and is among the most widely cited indicators, remains lower than it was before the pandemic. In contrast, other indicators, such as the BoJ Tankan's employment conditions diffusion index (DI), point to an unprecedented shortage of workers (Exhibit 1).

Some market participants point to the low job openings-to-applicants ratio as a reason why the recent pick-up in inflation and wages is likely to be transitory. However, we think that MHLW's job openings-to-applicants measure fails to capture the tightness in the labor markets and understates the severity of Japan's worker shortages.

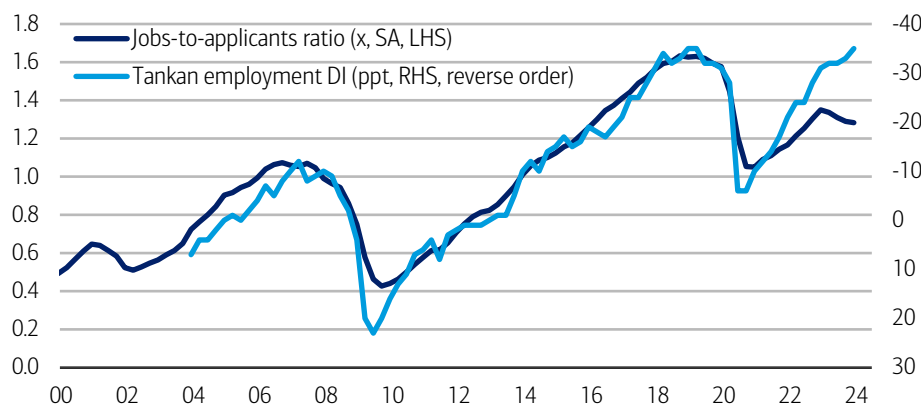
Jobs-to-applicants back to pre-COVID levels when distortions excluded

The decline in the jobs-to-applicants ratio since the start of the pandemic reflects a simultaneous increase in applicants and decline in job openings. However, most of the increase in applicants reflects seniors seeking work as the retirement age rises. The ratio also captures only job postings via the government's Hello Work job centers, which represent a declining share in the markets, and ignores private-sector job search websites. It therefore understates the total number of job openings.

Recalculating the jobs-to-applicants ratio using different assumptions gives much higher results than the published figures; one of our scenarios puts the ratio back at its pre-pandemic peak. This suggests that Japan is again facing a record shortage of workers, which we expect to drive further structural pressure for wage hikes and inflation.

Exhibit 1: Japan's two major indicators to directly measure labor market tightness

Job openings-to-applicants ratio remains lower than pre-COVID levels, in contrast to BoJ Tankan index



Source: BofA Global Research, MHLW, BoJ *Tankan employment DI = "excess employment" less "shortage of employment"

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Jobs-to-applicants ratio, BoJ Tankan give conflicting picture of labor market conditions

One of the most important questions in forecasting the outlook for the Japanese economy is how tight the labor market actually is. Labor market trends are key both to Japan's longstanding goal of sustained inflation and to the BoJ's monetary policy conduct.

However, this is a tricky question to answer given the lack of data that directly measure labor market tightness. The active job openings-to-applicants ratio is the most commonly used indicator of labor market tightness, but it remains below pre-pandemic levels and does not definitively indicate a growing shortage of workers. This conflicts with the employment conditions DI in the BoJ Tankan, another frequently used indicator¹, which has recovered to its pre-pandemic peak and indicates a record shortage of labor (Exhibit 1).

The jobs-to-applicants ratio implies that the shortage of workers has eased at least compared with before the pandemic, and because of this many market participants continue to argue that inflation and wage hikes are transitory.

However, we do not think the ratio gives an accurate picture of recent labor market tightness, and see the BoJ Tankan employment conditions DI as closer to reality. We think assessments of current conditions based on the jobs-to-applicants ratio understate the severity of Japan's labor shortage and the structural wage hikes and inflationary pressure that it will bring about.

Structural factors mean jobs-to-applicants ratio understates reality

The jobs-to-applicants ratio is calculated based on the number of applicants as a percentage of open positions, i.e. the average number of jobs available per jobseeker. It is compiled by Japan's Hello Work government-run job centers, and is the most widely-used indicator of domestic labor market supply/demand. It is also used as a coincident economic indicator by the Cabinet Office in gauging the state of the economy given its correlation with the labor market.

Breaking down the jobs-to-applicants ratio into its components, Japan has around 200,000 more jobseekers and roughly 300,000 fewer job openings than before the pandemic (Exhibit 2). As a result, the jobs-to-applicants ratio (including part-time workers, seasonally-adjusted) has fallen from around 1.6x prior to the pandemic to 1.27x (Exhibit 1).

We think both the increase in job applicants and decline in job openings are largely the result of particular structural factors. This leads us to conclude that the jobs-to-applicants ratio understates how tight the labor market actually is.

Rapid increase in senior jobseekers

The increase in the number of job applicants since end-2019 (219,000) is skewed heavily by age group, with 86% of the increase coming from the 50+ demographic and 33% from the 65+ group (Exhibit 3).

The number of seniors seeking employment has risen in line with the gradual increase in retirement age since 2013, and the number of job applicants aged 65 or over has risen by around 50% since 2019. However, applicants aged 49 or under are up only slightly, by around 30,000 (+3.2%) since end-2019.

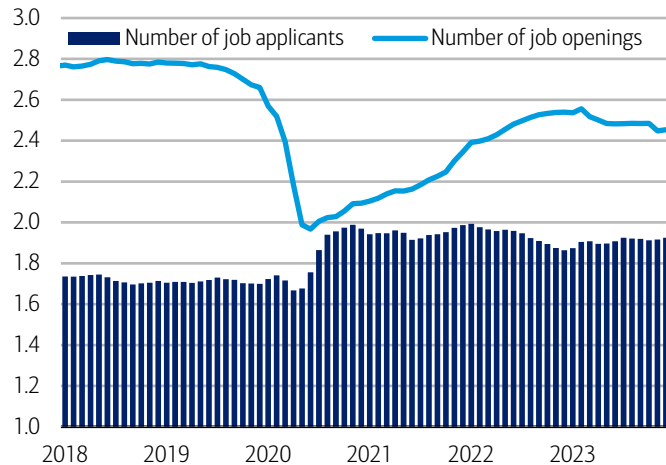
Rising workforce participation among the elderly is increasing the supply of labor, and we do not deny that this could help ease overall worker shortages. However, due to

¹ The labor input gap released by the BoJ may also indirectly measure labor market tightness, but we exclude it from the discussion in this report given its focus on how much average labor supply diverges from the historical trend, rather than on estimating labor market tightness per se.

differences in working styles, physical limitations, and skill mismatches (including IT skills), we think it is difficult for the increase in labor supply of senior workers to absorb all the demand for workers aged 49 or under. We therefore think the shortage of labor in the under-49 age group is likely to remain as severe as it was before the pandemic.

Exhibit 2: Number of job openings and job applicants (mn, SA)

Japan has around 200k more jobseekers and roughly 300k fewer job openings than before the pandemic

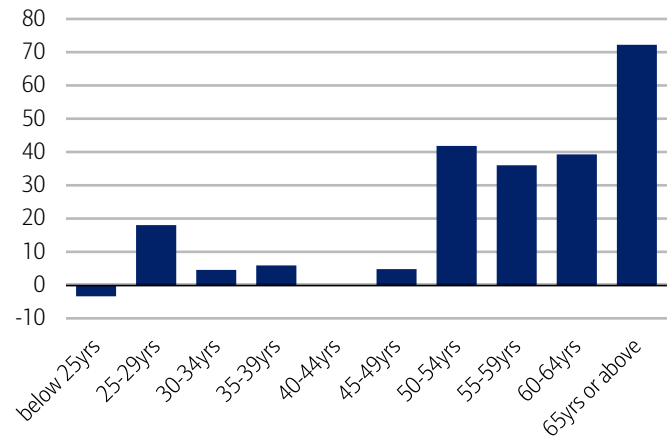


Source: BofA Global Research, MHLW

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Exhibit 3: Changes in number of job applicants by age group (Dec '23 vs. Dec '19, thousand)

Rapid increase in senior jobseekers as the retirement age rises



Source: BofA Global Research, MHLW

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Hello Work's fading presence in market for job searches

The decline in job openings also reflects a major impact from a structural factor: the falling percentage of job postings and applicants using Hello Work. As noted, government data on the jobs-to-applicants ratio and job openings comes exclusively from Hello Work, and does not include the private-sector career websites that have further increased their presence in the past several years.

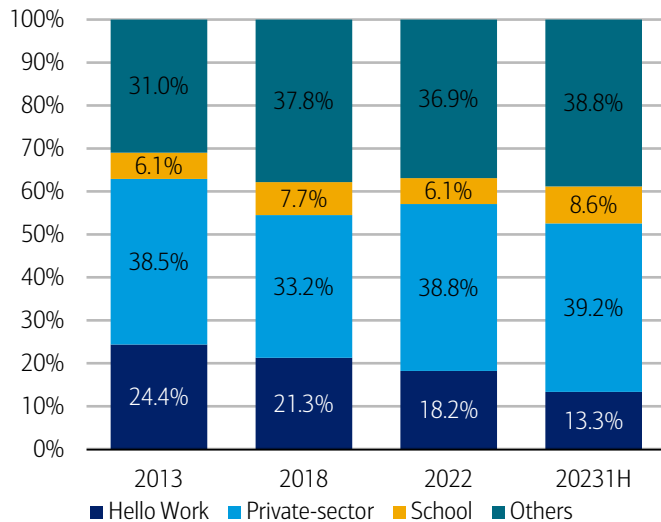
The government's employment survey shows that the percentage of job applicants finding employment via Hello Work (including its website) was down to 21.3% in 2018 (prior to the pandemic) and 13.3% in 1H CY23. The percentage of applicants finding positions via private-sector career websites rose from 33.2% to 39.2% (Exhibit 4).

This is echoed by Nowcast's HRog Wage Now data (job openings index), which show that in December 2023 the number of job openings aggregated by scraping data from 116 job search websites (both private-sector and Hello Work) was up around 20% versus 2019 (Exhibit 5).

This is likely because companies are increasingly focusing on private-sector career website postings as the percentage of jobs posted to Hello Work declines. This growing number of non-Hello Work postings is not showing up in the government data.

Despite considerable volatility over time, professions where job search website postings are growing at a much faster rate than Hello Work postings include head office positions, IT engineering, mechanical engineering, and construction/civil engineering work (Exhibit 6). The specialized skills required by many of these professions suggest that companies may increasingly be posting positions on search websites that focus on a specific job area.

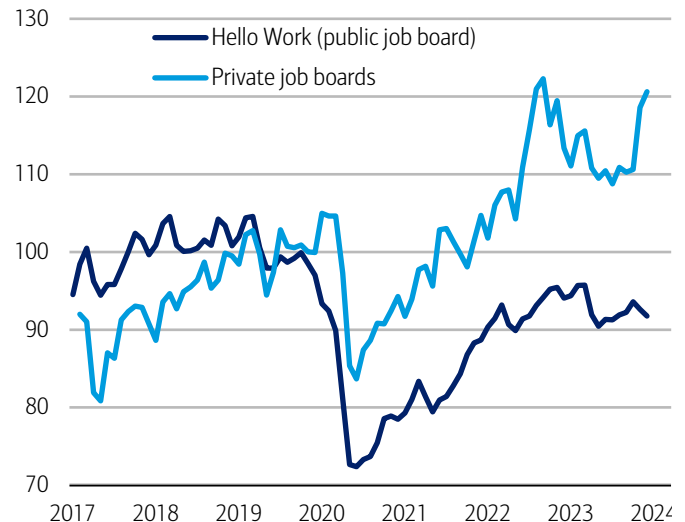
Exhibit 4: The channel job applicants find employment through
Hello Work's fading presence in market for job searches



Source: BofA Global Research, MHLW *Hello Work = Hello Work + Hello Work website, Private sector includes private-sector career website.

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Exhibit 5: Trend in job offers (2019=100, NSA)
The number of non-Hello Work postings is growing



Source: BofA Global Research, Nowcast, MHLW *regular workers only (not including part-time workers)

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Jobs-to-applicants ratio ex. structural factors may be above pre-COVID levels

The rapid increase in senior job applicants, and the decline in the number of jobs posted to Hello Work as a percentage of the total, are likely creating a downward bias in the jobs-to-applicants ratio. While we cannot completely eliminate this bias, below we look at how the jobs-to-applicants ratio would change if we adjust it based on a few simple assumptions. We re-calculated the ratio based on the following scenarios.

- (1) Exclude the impact on the total number of job applicants from the increase in senior applicants aged 60 or over
- (2) Use the simple average of changes in the number of job postings to Hello Work and to job search sites
- (3) Use (1) and (2) to derive the number of job applicants and job openings

We show our results in Exhibit 7. In scenarios (1) and (2), the jobs-to-applicants ratio is substantially higher than the published figures, while in scenario (3) it has already returned to pre-pandemic levels. This is broadly consistent with companies' BoJ Tankan survey responses indicating that they face a similar shortage of labor to before the pandemic (Exhibit 1).

These results suggest that Japan is once again facing a record shortage of workers that is set to worsen going forward. In turn, the resulting structural wage pressures increase the likelihood of sustained inflation.

Exhibit 6: Changes in job openings by professions (career website vs Hello Work)

Job openings are well above Hello Work for some professions

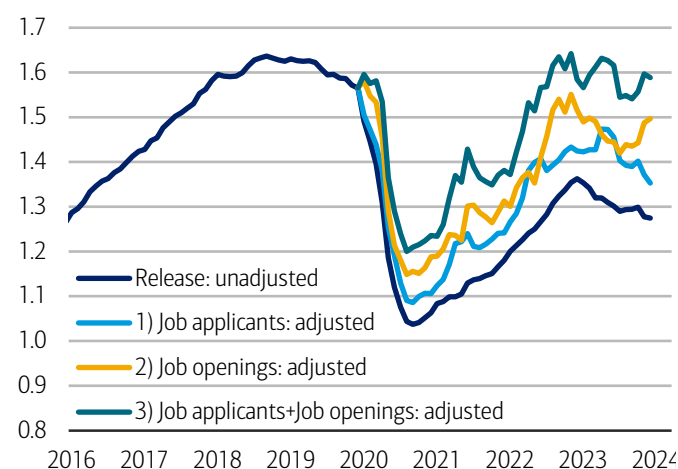
	Share of job openings in 2019	Job openings in 4Q23 (vs 4Q19)	
		Career website	Hello Work
All	100.0%	16.3%	-5.1%
Head office positions	15.5%	56.0%	-5.9%
IT engineering	3.2%	103.1%	2.9%
Construction, civil engineering	12.2%	68.9%	2.1%
Logistics, research, etc.	11.7%	-10.6%	-7.0%
Specialist job	1.7%	19.0%	3.9%
Manufacturing	7.7%	3.0%	-4.7%
Electronics, machinery, autos	4.4%	68.7%	3.8%
Medical, pharmaceutical, welfare	23.4%	7.6%	-3.1%
Sales, services	5.7%	-8.0%	-24.4%
Dining-out, food	7.6%	-39.9%	-22.1%
Agricultural	0.7%	2.7%	-1.3%
Others	6.3%	-	-

Source: BofA Global Research, Global Research, Nowcast, MHLW

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Exhibit 7: Implied jobs-to-applicants ratio when adjusting some structural factors

Jobs-to-applicants ratio ex. structural factors may be above pre-COVID levels



Source: BofA Global Research, MHLW *Please see the main text for the detail of each adjustment
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