

## SHORTAGE OF LABOR IN THE RETAIL INDUSTRY AND INITIATIVES FOR IMPROVEMENT

— RETAILERS STRIVING TO ATTRACT MORE JOB SEEKERS THROUGH INTRODUCTION OF LABOR-EFFICIENT MEASURES AND ENHANCED JOB APPEAL —

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### SUMMARY

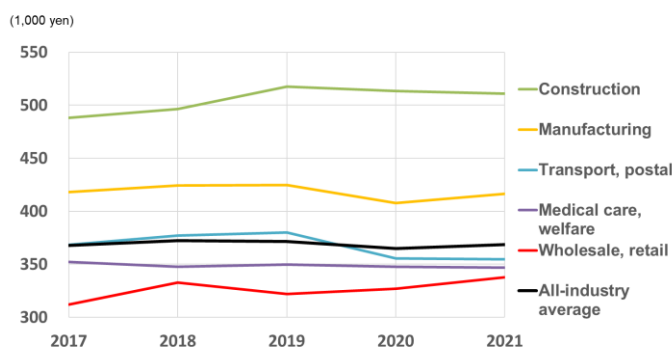
- The shortage of labor in the retail industry has become a chronic problem, and there appears to be little prospect for improvement in the situation.
- Unfavorable working conditions, low wages for employees due to weak retailers' profits, lack of job satisfaction, and low future career prospects are the main reasons behind the labor shortage. To solve these problems, retailers are pursuing a wide variety of initiatives, including introduction of new technologies and equipment, and expansion into new business areas and business formats.
- Companies will need to transform themselves into more profitable entities while increasing efficiency. The measures taken and the results achieved will likely set apart the winners from the losers going forward.

### 1. CURRENT LABOR SHORTAGE IN THE RETAIL INDUSTRY: BACKGROUND OF THE NEED FOR LABOR-SAVING MEASURES

The retail industry is facing a more serious labor shortage than other industries, and this trend is especially notable in developed countries.

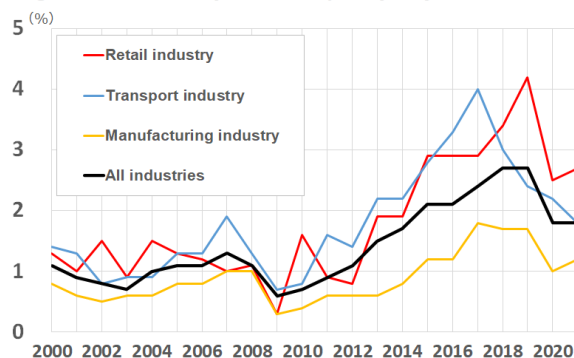
In Japan, the retail industry is facing a labor shortage due to several factors. These include a shrinking workforce resulting from a declining birthrate and aging population, which is affecting all industries. In addition, the retail industry is plagued by long working hours, difficulty in taking days off, and low wages (Figure 1). The job vacancy rate in the retail industry is higher than the overall rate for all industries, indicating a persistent and serious labor shortage for retailers (Figure 2).

**Figure 1: Total monthly cash wages in Japan by industry**



Note: "Total cash wages" is the sum of "regular salary" and "special salary," before deducting income tax, social insurance premiums, union dues, in-house purchases, etc.  
Source: Compiled by MGSSI based on data from the Japanese Ministry of Health, Labour and Welfare's Monthly Labour Survey

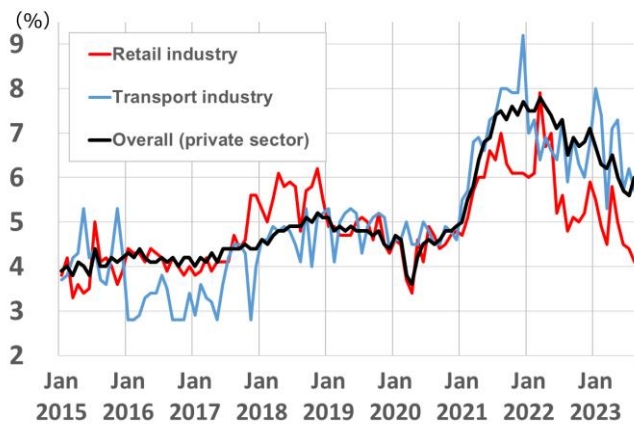
**Figure 2: Job vacancy rates in Japan by major industries**



Source: Compiled by MGSSI based the data of the Japanese Ministry of Health, Labour and Welfare's Survey on Employment Trends

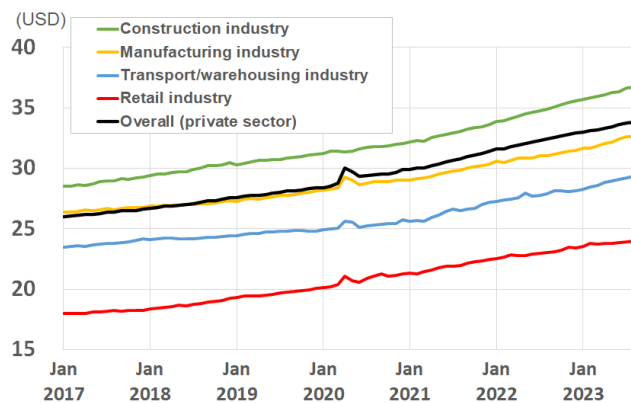
In the US, although the job vacancy rate in the retail sector has remained below the all-industry rate since 2021 (Figure 3), the industry still accounts for approximately 10% of the total number of job vacancies across all industries, and thus has a significant impact. As in Japan, the low level of wages in the US is one factor contributing to the difficulty of filling vacancies (Figure 4).

Figure 3: Job vacancy rates in the US by major industries



Source: Compiled by MGSSI based on data of the US Bureau of Labor Statistics, US Department of Labor

Figure 4: Average wages in the US by major industries



Source: Compiled by MGSSI based on data of the US Bureau of Labor Statistics, US Department of Labor

In Europe, the employment of foreign and immigrant workers as low-cost labor is widespread. Currently, there is no apparent labor shortage in the retail industry. However, if immigration restrictions are tightened, the problem will become more visible. Therefore, it is difficult to consider relying on foreign and immigrant workers as a sustainable solution.

In addition to the unfavorable working conditions<sup>1</sup> and low wages<sup>2</sup> mentioned above, lack of job satisfaction and future career potential<sup>3</sup> in the retail industry are also cited as major reasons behind the unfilled retail job openings in Japan and the US (Figure 5). To solve these problems and call attention to the attractiveness of the retail industry, companies are focusing their efforts on labor-saving measures by introducing new technologies and equipment. Increasingly, retailers are attempting to improve productivity and address labor shortages by investing in equipment to make operations more efficient, and the details of these investments are diverse among different retailers.

Figure 5: Major factors behind the labor shortage in the retail industry

Factors	Citation of examples	Description of measures in this report (chapter/section)
Working environment (high level of mental and physical stress)	Japan's Ministry of Health, Labour and Welfare (a) CDC (b)	2-1
Low wages (due to low retail profits)	NTT East (c) Pew Research Center (d)	2-2
Difficulty in finding satisfaction and lack of future career prospects	ShopTen! (e) RetailWire (f)	2-3

Source: Compiled by MGSSI based on various documents

<sup>1</sup> Japan Industrial Safety & Health Association, Ministry of Health, Labour and Welfare, "Support for coping with stress in the retail industry" (in Japanese), <https://kokoro.mhlw.go.jp/brochure/supporter/files/stresstaisyo22-kouri.pdf>, Centers for Disease Control and Prevention, "Reducing Fatigue and Stress in the Retail Industry: Workplace solutions", <https://blogs.cdc.gov/niosh-science-blog/2019/09/16/retail-fatigue/>

<sup>2</sup> Biz Drive Column, Nippon Telegraph & Telephone East Corp., "Expanding Use of ICT in the Retail Industry (Vol. 38), Why is there a labor shortage in the retail industry? Explanation of causes and countermeasures for improvement", (in Japanese), [https://business.ntt-east.co.jp/bizdrive/column/post\\_126.html](https://business.ntt-east.co.jp/bizdrive/column/post_126.html), Pew Research Center, "Majority of workers who quit a job in 2021 cite low pay, no opportunities for advancement, feeling disrespected", <https://www.pewresearch.org/short-reads/2022/03/09/majority-of-workers-who-quit-a-job-in-2021-cite-low-pay-no-opportunities-for-advancement-feeling-disrespected/>

<sup>3</sup> ShopTen!, "The future of the retail industry, challenges, and what future workers should think about"(in Japanese), <https://www.storestaff-tenshoku.com/the-future-of-retail/>, RetailWire, "Where are the advancement opportunities for retail's frontline workers?" <https://retailwire.com/discussion/where-are-the-advancement-opportunities-for-retails-frontline-workers/>

## 2. DIRECTION OF RETAIL COMPANIES' EFFORTS TO ADDRESS THE LABOR SHORTAGE

### 2-1. Reduce stress levels (improve working conditions and eliminate the negative perception of the workplace)

The two most stressful tasks for retail workers are handling cash and transporting and displaying merchandise.

#### **Reduce the number of cashiers and increase employee efficiency**

Cash handling is mainly the duty of cashiers<sup>4</sup>, and is said to be particularly stressful, as cash handling must be done accurately and quickly. The use of technologies can replace this task, thereby reducing the burden on store clerks. Amazon Go, launched by Amazon in December 2016, is a prime example of a cashier-less<sup>5</sup> store. This store format was made possible by combining a number of technologies, including customer (individual) authentication using smartphone apps and QR codes, AI-equipped cameras to authenticate the movement of people and objects, and weight sensor-equipped shelves. The stores do not have any cashiers, and payment is made efficiently from a customer's registered credit card when the merchandise is placed in a bag and the customer leaves the store. Currently, the company's system is being used in the US at airports, stadium concession stands, and other venues. Since no store clerks are assigned to the cash registers, it is possible to save on manpower and reassign those workers to handle other tasks.

Another labor-saving measure that has already been introduced is the self-checkout system<sup>6</sup>. According to the Supermarket Annual Statistical Survey Report<sup>7</sup>, among Japanese supermarkets, the installation rates<sup>8</sup> for full self-checkout<sup>9</sup> systems is 31.1% and for semi self-checkout<sup>10</sup> systems is 78.2%. In the US, 96% of the approximately 38,000 stores of 96 grocery companies have installed self-checkout systems<sup>11</sup>. Although many companies are introducing self-checkout systems as an effective means of addressing the labor shortage, shoplifting has recently skyrocketed against the backdrop of high prices and economic uncertainty, leading major US retailers to debate the pros and cons of using self-checkout systems.

#### **Take a cue from the logistics industry: Broaden perspectives beyond efficiency**

Another characteristic of the retail industry is the high frequency of transporting and displaying goods, namely moving merchandise and stocking shelves. Supporting these tasks with machines is expected to reduce the physical burden on employees and improve work efficiency. In this regard, to provide support in moving and displaying items in stores and backroom areas, retailers are starting to adopt the use of autonomous mobile robots (AMRs), which are already used in logistics warehouses and other facilities to reduce the number of required workers and improve efficiency. Kasumi, a food supermarket company in Japan, has been operating AMRs at its new format stores since January 2022 as a solution to support in-store picking operations for its online supermarket business (Figure 6).

<sup>4</sup> Workers who handle cash at the cash registers at the time of checkout for customers paying for purchases.

<sup>5</sup> "Cashier-less" because there is no cashier, but not "unmanned" because employees are always present in the store to restock merchandise, to clean, etc.

<sup>6</sup> Customers themselves perform all or part of the process of checking out, from product scanning to payment.

<sup>7</sup> Source: National Supermarket Association of Japan (2023)

<sup>8</sup> Calculated as the sum of the percentages of store operators who have installed self-checkout systems in "more than half of their stores" and those who have installed such systems in "fewer than half of their stores".

<sup>9</sup> As customers can handle all processes, from scanning of product barcodes to payment, there is no need to interact with any store employees.

<sup>10</sup> The store clerk scans the product bar code, and the customer pays the displayed amount using the provided checkout machine.

<sup>11</sup> Source: Survey conducted by the US FMI (The Food Industry Association)

Figure 6: An AMR operating inside a Kasumi supermarket



Source: LNEWS <https://www.lnews.jp/2022/01/o0128302.html> (accessed November 8, 2023)

Design for logistics (DFL), a supply chain management concept aimed at improving product and packaging design from a logistics perspective to increase the loading efficiency of trucks and containers, can also be applied to the retail industry. One example of this is the partial opening of the cardboard boxes used for merchandise transport and using them as product display fixtures. Another is a barcode printing strategy adopted by major German supermarket chain operator ALDI. For its private brand products, the company prints multiple barcodes on all sides or long barcodes encircling the packaging to facilitate product scanning (Figure 7). While this measure is not the same as those aimed at improving the efficiency of merchandise transport, it could be described as an extension of DFL to retail operations, or design for retail (DFR) initiatives.

Figure 7: Barcodes on private brand products of German supermarket operator Aldi



Source: The Suburban Mom <https://www.suburbanmom.com/2013/08/15/10-reasons-you-should-shop-at-aldi/> (accessed November 8, 2023)

### Other measures

In the US, convenience store chain Wawa and drugstore operator Walgreens are developing stores with no product shelves or displays. The stores have only touch-screen terminals and a counter. Store employees gather the items from the store backroom (warehouse) to fulfill the orders placed by customers via the terminal or online, and the ordered products are handed to customers at the counter. The backroom is equipped with automatic picking equipment, which is already in use at distribution warehouses, eliminating the need to display products. This strategy is attracting attention as a way to reduce the number of store employees and improve efficiency.

Retail employees are also responsible for other important tasks such as merchandise ordering, inventory control, and related demand forecasting to prevent lost sales opportunities owing to product shortages and losses due to spoilage, as well as to make effective use of limited store and backroom space. Retailers are working to reduce errors, such as erroneous ordering, by streamlining the process of negotiating with suppliers (i.e., manufacturers) and placing orders automatically with the use of AI.

## **2-2. Increase retail profit margins (rectify problem of low wages, transform into a profitable industry)**

Retailers originally rooted their business in the buying and selling of products, but strong price pressures have made it difficult for that business model to generate profits on an ongoing basis. In the past, there were calls for “de-retailing”, that is, to move beyond the framework of retailing operations by demonstrating a company’s capabilities as a manufacturer through the development of private-label brand products<sup>12</sup> to improve profit margins and emphasize the uniqueness of a retailer’s own merchandise line. However, as many companies have developed private-label brands, it has become difficult for retailers to improve profit margins and display a competitive advantage by this approach alone. In addition, during the period of the rise and expansion of e-commerce in the 1990s, IT companies that were not retailers, such as Amazon and Rakuten, entered the retail industry and took the industry by storm. What emerged was a business operation in which an unprofitable retail business could be combined with another business to become profitable, a strategy that was not feasible for a standalone retailer.

In this environment, Aeon, for example, has sought to improve its overall profitability by expanding into businesses that are more profitable than retailing. This includes ventures into commercial development, where Aeon operates its own retail business and earns fees from other retailers who lease space in its Aeon Mall shopping complexes. Furthermore, Aeon has also ventured into the financial services sector by issuing credit cards and providing banking services. Walmart in the US employs more than 20,000 data scientists and software engineers out of its 2.3 million employees worldwide. It has the element of a data-driven IT tech company, which is unprecedented for a retailer. Walmart develops sales promotion plans based on detailed customer data analysis, as well as demand forecasting and product ordering systems powered by AI. While these operations are based on retailing, this approach to increasing overall profits by embarking on peripheral business can be described as “ultra-retailing” rather than “de-retailing”.

## **2-3. The future of retail: Dreams, hopes, aspirations (can do what you really want to do — customer service, store development, etc.)**

Since many people who want to work in retail prefer to work in customer service, fulfilling these desires may increase job openings or even reduce turnover. In stores, there are many tasks other than customer service, and if these tasks can be eliminated as much as possible so that more time can be spent on customer service, it will increase the level of satisfaction of employees who find customer service to be a rewarding occupation.

As e-commerce continues to grow, startups and venture companies that struggle to open their own physical stores are increasingly seeking opportunities to showcase their products in a brick-and-mortar setting. These new retailers recognize the value of providing consumers with hands-on access to their products and engaging in interactive, in-person conversations with knowledgeable employees. Neighborhood Goods (US) provides store space and personnel to these startups, with a focus on customer communication through product explanations and Q&A exchanges rather than sales. Similarly, b8ta (Beta), a US company specializing in the sale of the latest gadgets, such as novel tools, small electronic, and information devices, has developed a business model that generates revenue by providing “customer feedback” obtained from interactions between customers and employees to the companies displaying products at its stores. While the employees are expected to be more attentive to customer needs, they are not tied to selling the merchandise on display. This allows them to better demonstrate their personal knowledge and communication skills.

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<sup>12</sup> Private-label brand products are products that are planned (manufactured for) and sold by retailers under their own label.

In addition, the introduction of technologies, such as virtual stores in the metaverse, could broaden employment opportunities. This is especially beneficial for individuals who may have difficulty standing for extended periods or who feel insecure about their physical appearance and are hesitant to pursue work in industries with frequent human interactions.

Many retailers view the introduction of labor-saving technologies not only as a way to substitute humans with machines but also as a means to relieve employees from tedious tasks and redirect them towards more customer interaction. This is expected to lead the retail industry towards increasing the workforce by focusing on the rewarding aspects of retailing. Companies will need to transform themselves into more profitable entities while improving efficiency. Retailers are beginning to differ in their initiatives to improve operational precision and the results of those efforts. These differences will likely determine the fate of these companies.