Article

Responses to Overtime Work Caps: Case Studies of Four Freight Transport Companies

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I. Introduction

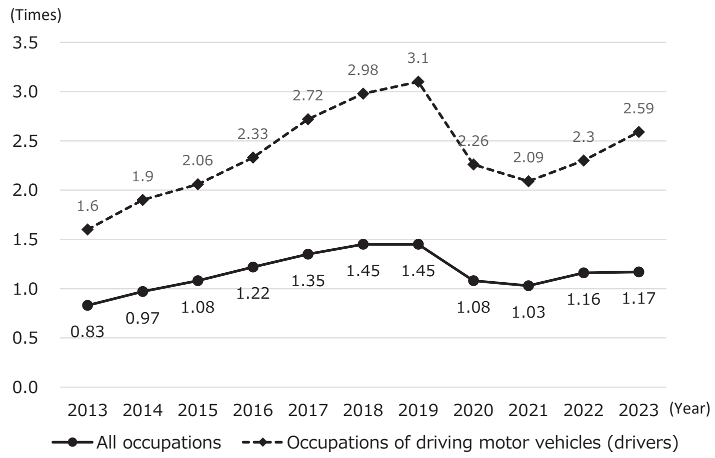
This paper presents case studies of four freight transport companies, analyzing how they responded to the caps on overtime work, which have been tightened as part of the "work-style reform" in Japan. The new caps, introduced by the amendment to the Labor Standards Act in 2019, became applicable in April 2024, following a five-year grace period, to workers engaged in driving motor vehicles, i.e., truck drivers, bus drivers, and taxi drivers (hereinafter, "motor vehicle drivers").

In Japan, the above-mentioned drivers are subject to a set of rules known as the Ministry of Health, Labour and Welfare (MHLW) Notice, "Standards for Improvement of Working Hours of Motor Vehicle Drivers" (hereinafter the "Notice of Improvement Standards"). These rules stipulate in detail the working conditions of drivers, for example, "hours on duty must in principle be limited to 13 hours per day" and "continuous driving hours must be limited to four hours (with a break of at least 30 minutes)." Thus, motor vehicle drivers in Japan are required to work within the framework of the rules set forth by the Notice of Improvement Standards. From the perspective of labor policy, a key issue is how companies have responded to the new caps on overtime work. This paper specifically discusses the measures implemented by the target companies through case studies. Since space limitations prevent a detailed explanation of the Notice of Improvement Standards; those interested in the specific rules are advised to refer to the MHLW website.[1]

The introduction of the caps on overtime work mentioned above has raised a concern in Japan: the so-called "2024 problem in freight transport." Compared to other industries, the transportation industry has lower wage levels and longer working hours, which has led to shortages of truck drivers.[2] Therefore, this paper limits the analysis targets to truck drivers.

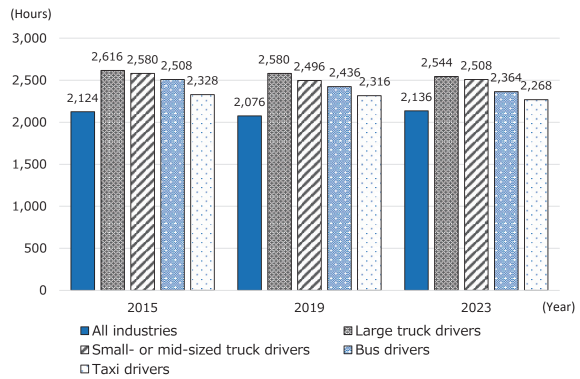
Let us look at the working conditions of motor vehicle drivers, focusing on truck drivers. Figure 1 shows the trends in the active job openings-to-applicants ratio. A higher ratio indicates more job openings and, consequently, a greater labor shortage. If the total for all occupations is interpreted as the overall average, the job openings-to-applicants ratio for occupations of driving motor vehicles is higher than the average, indicating that the labor shortage is correspondingly severe in this category. Figure 2 shows the trends in average annual working hours for various types of drivers. If the figures for all industries are interpreted as the overall average, truck drivers' working hours are longer than the average. Furthermore, looking at the annual average overtime hours, truck drivers' average overtime hours are longer than those in all industries (Figure 3). In addition, truck drivers have lower annual salaries compared to workers in other industries (Figure 4).

Under these circumstances, it was anticipated that tightening working hour regulations would reduce truck drivers' working hours but it could also lead to a decline in the overall transport capacity of the freight transport industry. This concern is known as the "2024 problem in freight transport."[3]



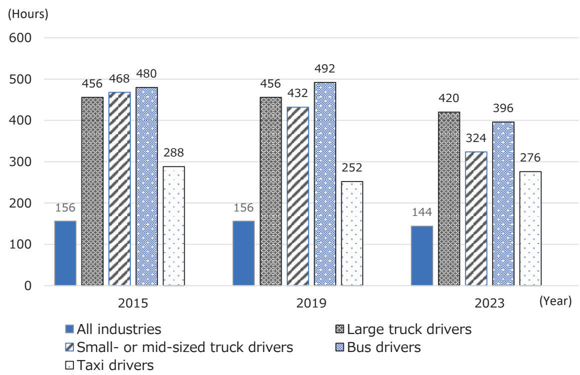
Source: MHLW, "Employment Referrals for General Workers" (Employment Security Service Statistics).

Figure 1. Trends in the active job openings-to-applicants ratio



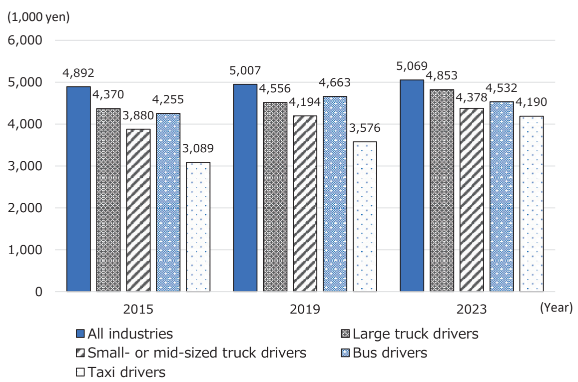
Source: Complied based on MHLW, "Basic Survey on Wage Structure" (e-stat).

Figure 2. Trends in the average working hours



Source: Complied based on MHLW, "Basic Survey on Wage Structure" (e-stat).

Figure 3. Trends in the average overtime working hours



Source: Complied based on MHLW, "Basic Survey on Wage Structure" (e-stat).

Figure 4. Trends in annual salaries

II. Framework and questions for analysis

Before proceeding to the specific analysis of companies, this section clarifies the analytical framework. The analysis in this paper incorporates industrial relations in the analytical framework, because labor unions participate in determining the working hours of individual workers.

According to Ishida (2003), industrial relations constitute a "system of rules governing employment relationships" and, in particular, refer to the trade between labor expenditure (provision of labor) and counter-performance (reward for labor)—specifically, "how much a worker would gain by doing what work for how long." Working hours, the subject of analysis in this paper, fall under the category of labor expenditure. Furthermore, to the best of my knowledge, even if a labor union organized at the workplace does not consist of a majority of workers—let alone when it holds a majority at the workplace—it is often the case that the representative of such labor union acts as a person representing the majority of the workers at the workplace when labor and management conclude an agreement on overtime work under Article 36 of the Labor Standards Act (Article 36 agreement). This is the reason industrial relations are utilized as a factor of an analytical framework in this paper.

Let us review the research findings in detail. Japanese labor unions have requested and negotiated with employers to reduce working hours (Shirai, Hanami, and Koshiro 1986; Shirai 1992; Matsui 2021, etc.). Furthermore, from the perspective of regulating working hours, labor unions participate in policy-making. This role is typically undertaken by national centers or industrial unions.[4] Asai (2022) describes the tripartite initiatives conducted by workers, employers, and the government, with the aim of improving the business environment and working hours in the trucking industry. Shuto (2024) notes that, while the three parties held consultations and engaged in rule-making to address issues regarding working conditions, including drivers' working hours, these efforts alone proved insufficient; therefore, the three parties invited shippers to hold a four-party discussion and demanded that shippers and consignees reduce freight transport burdens.

It has been demonstrated that labor unions participate in determining working hours at the company level as well. Okochi, Ujihara, and Fujita (1959) revealed, through a study focused on the iron and steel, railway and bus, and coal industries, that labor and management discuss working hours via the workplace organizations. Ishida, Tomita, and Mitani (2009) analyzed the development, production technology, and production departments of automotive companies and pointed out that working hours are a critical issue in industrial relations and are regularly reviewed by both parties. Additionally, Ishida and Terai (eds., 2012) highlight three case studies in which labor unions have worked to reduce working hours.

However, Ishida, Tomita, and Mitani (2009) note, through a comparison of Japan and the United States, that the negotiation on the trade between labor expenditure and counter performance is conducted through collective bargaining in the United States, whereas in Japan, such trade is negotiated through individual bargaining. To put it bluntly, in Japan, even if labor unions engage in collective bargaining with employers, individual workers' labor expenditure is negotiated on an individual basis,[5] in which case the labor unions' involvement (regulation) in determining workers' labor expenditure would be weakened.

Accordingly, this paper sets out the following three research questions: (1) how companies responded to the application of the new working hour regulations; (2) what issues arose following the application of the new regulations; and (3) how labor and management addressed those issues.

III. Survey overview

3.1 Overview of companies surveyed

A brief overview of the companies surveyed is provided below. As mentioned earlier, this paper analyzes four freight transport companies. As shown in Table 1, all of the companies surveyed are large companies with more than 1,000 employees. These

Table 1. Companies' attributes, business characteristics, main analysis targets

Companies	Business area	Number of employees	Business characteristics	Main analysis targets
Freight Transport Company A	Nationwide	Approx. 17,000	B2B business. Most of the customers are small- and medium-sized enterprises (workload is difficult to predict).	Drivers for city and inter-store routes
Freight Transport Company B	Nationwide	Approx. 14,000	B2B business. Medium- or short-distance transportation.	Medium/short-distance transportation drivers
Freight Transport Company C (Branch S)	Nationwide	Approx. 170,000	Mainly B2C business. Business needs continue a downward trend.	Drivers for city routes
Freight Transport Company D (Branch N)	Nationwide	Approx. 2,200	B2B business. Company C's 100% subsidiary.	Drivers for inter-store routes

Note: B2B = Business-to-Business; B2C = Business-to-Consumer.

companies conduct business nationwide, primarily on a B2B basis. They have labor unions, and interviews were conducted mainly with these unions.

Here is a detailed explanation of the situation at each company surveyed. Many of Freight Transport Company A's customers are small- and medium-sized enterprises. Consequently, there are numerous cargo collection and delivery locations, and the volume of cargo (workload) is not known until the morning of the delivery day. A key characteristic of Company A is the difficulty in forecasting its workload. Company A operates two types of routes: routes that manage collections and deliveries within a specific area, starting from a designated store (hereinafter referred to as "city routes" and routes that connect stores (hereinafter referred to as "inter-store routes"). The former involves short-distance transportation, while the latter involves long-distance transportation. For the former, Company A conducts operations almost entirely in-house, but for the latter, it outsources approximately half of its workload to partner companies both within and outside its group. For Company A, the drivers responsible for these two routes are the main analysis target.

Freight Transport Company B, like Company A, is engaged in commercial freight transport (B2B). A distinctive feature of Company B is that it operates multiple business units and manages transportation not only for other companies but also for its own internal business units. For example, Company B operates a warehousing business and transports cargo shipped from its facilities. As part of its freight transport operations, Company B outsources long-distance transportation to its partner companies. Therefore, the drivers of medium- or short-distance transportation will be the focus of the analysis for Company B.

Freight Transport Company C is facing a long-term downward trend in demand and is striving to ensure a stable supply of services while streamlining its operations. Like Company A, Company C operates two types of routes: routes that manage collections and deliveries within a specific area, starting from a designated store (hereinafter referred to as "city routes"), and long-distance transportation routes that connect stores (hereinafter referred to as "inter-store routes"). Company C outsources part of its city route operations to local companies and outsources most of its inter-store route operations to its subsidiary, Freight Transport Company D. Therefore, the target of analysis for Company C is the drivers responsible for the city routes.

Freight Transport Company D is a wholly owned subsidiary of Company C. Since Company D undertakes operations primarily for Company C, it is affected by the downward trend in demand for Company C's business. Furthermore, as mentioned regarding Company C, Company D is responsible for Company C's inter-store route transportation (long-distance transportation). Therefore, the target of analysis for Company D is the long-distance transportation drivers. However, Company D outsources more than half of the operations outsourced to it by Company C to its partner companies. The relationship between Company C and Company D, which receives long-distance transportation contracts from Company C, and between Company D and its partner companies that receive contracts from Company D, is precisely a subcontracting relationship.

IV. Case analysis

4.1 Companies' response

(1) Response to labor shortages

The companies surveyed that discussed in this paper generally face the challenge of labor shortages. Under these circumstances, if working hour regulations are tightened, these companies will be required to reduce working hours per employee, and if they attempted to deal with the same workload as before, they would face an even more severe labor shortage. Therefore, the companies must address this issue by: (1) increasing the number of employees; (2) reducing the number of personnel required for operations by implementing measures to improve efficiency, such as business restructuring; or (3) conducting a combination of (1) and (2).[6]

Among these three options, the one discussed here is option (2), improving efficiency through business restructuring. As shown in Figure 1, the transportation and postal industries continue to face labor shortages, making it difficult to increase staffing levels. One example of an initiative to overcome this situation is a modal shift. "Modal shift" refers to the "transition of freight transportation currently carried out by trucks and other motor vehicles to that by railways or ships, which has a lower environmental impact" (Aoki and Araki 2023). This initiative is being implemented by Freight Transport Companies A and B. For example, Company A, anticipating the application of working hour regulations, switched to rail transport for long-distance routes for which the drivers are likely to remain on duty for hours beyond the daily limit. The section below will focus on the initiatives implemented by the companies surveyed for their motor vehicle drivers.

(2) Revising transportation routes

All of the freight transport companies surveyed revised their transportation routes. Freight Transport Company A reduced the number of stores where the unloading of cargo is conducted on a single route. For example, when transporting goods to Osaka, unloading previously took place at three stores within Osaka City (Branch A → Branch B → Branch C), but the number of unloading destinations was reduced to two stores (Branch A → Branch B). By reducing the number of unloading destinations by one, the company can eliminate the unloading time at Branch C (typically about one hour) and the travel time for one section of the route (Branch B → Branch C). Company A also implements a system to consolidate shipments from branches with low delivery volumes to a specific area and transport them collectively. This has reduced transport time to a specific area by one to two hours.

Freight Transport Company B introduced relay transportation during the grace period for the application of working hour regulations. Relay transportation is a method of transportation in which a single route is divided among multiple drivers, serving as one of the measures to curb long working hours of truck drivers and address labor shortages.[7] There are three types of relay transportation: (1) a method where drivers switch trucks with each other at a relay point; (2) a method where the tractor units of semi-trailer trucks are swapped at a relay point; and (3) a method where cargo is swapped at a relay point. Company B employs the method it calls "switch transportation," which falls under category (1). As a result, Company B's drivers are now able to return to their home depot within the daily limit for hours on duty. Company A, meanwhile, employs the method it calls "docking transportation," which also falls under category (1). As defined by Company A, this refers to a transportation method where, when the truck returns to Branch A after transporting cargo from Branch B to Branch C, its driver is switched with another driver at a midpoint between the branches.

In anticipation of the application of working hour regulations, Freight Transport Company C implemented measures, such as revising pickup routes (pickup times) and transferring cargo at relay points.[8]

Freight Transport Company D, through collaboration within its internal units and with its partner companies, has increased transportation involving the switching of drivers and cargo at relay points (relay transportation) nationwide, and has also introduced services using trailer-trucks and other vehicles that are larger than conventional trucks. The company's Branch N has implemented such initiatives as reducing the number of branches where cargo is unloaded per trip or rearranging the order of branches where unloading takes place.

(3) Making requests to shippers

Freight Transport Companies A, B, and D made requests to their shippers. Company A asked the shippers to use software that allows for online pickup orders and shipment preparation. Using this software, the freight transport company can obtain pickup order information, thereby identifying "what kind of and how much cargo to pick up, and where," and the software also allows it to create shipping documents. Company A shares this information with its delivery branches, which helps ensure efficient delivery. The use of this software has reduced the time required for pickups at collection points and unloading at branches.

Freight Transport Company B requested that shippers reduce cargo waiting time. Some shippers accommodated this request by introducing a truck berth reservation system. A "truck berth" refers to a "place to park trucks to load and unload cargo,"[9] and a "truck berth reservation system" is a "system where freight transport companies make reservations for truck berths at freight transport centers (delivery destinations) for carrying out loading and unloading" (Aoki & Araki 2023). Advance registration for the use of a truck berth serves to prevent the concentration of truck arrivals during specific time slots, alleviate congestion at the berth, and reduce cargo waiting time. This system also makes it possible to visualize the occupancy status of the berth and utilize the status information for efficient operations.[10] Furthermore, Company B introduced the truck berth reservation system for its own operations, in an effort to reduce cargo waiting time for its partner companies.

Freight Transport Company D proposed a timetable revision to its parent company (Freight Transport Company C). Freight Transport Company C accepted Company D's proposal to revise the timetable for some routes (by shifting the timetable later) so that Company D could comply with working hour regulations. As a result, drivers responsible for long-distance transportation at Company D have been able to operate within the daily limit for hours on duty even after April 2024.

(4) Developing support systems

Branch S of Freight Transport Company C uses an app to monitor the pickup and delivery status. The branch has divided its service area into seven sections, with each team handling deliveries in its assigned section. By using the app, drivers responsible for city routes can now take the shortest route to their delivery locations, enabling more efficient pickups and deliveries. On the other hand, delivery times tend to be longer in residential areas, where there are many cargo pickup and delivery locations, and mountainous areas, where distances between those locations are long. Therefore, Branch S has developed a system where drivers will check the app and provide support to other areas when they finish pickups and deliveries in their areas. This has led to a reduction and leveling of overtime hours for all drivers in charge of the city routes.

(5) Securing and developing rest facilities

In order to avoid violating the Notice of Improvement Standards, Freight Transport Company C implements measures to ensure that its drivers can take a break of at least 30 minutes outside the branch office when sudden or temporary work continues and the drivers are likely to engage in continuous driving for more than four hours.[11] However, since rest facilities are not uniformly maintained across the area covered by Company C's Branch S, drivers are currently unable to take breaks safely and with peace of mind. Accordingly, Branch S of Company C's labor union has demanded that the company develop rest facilities, and the company branch is working to address this issue.

4.2 Labor unions' response

Table 2 shows the initiatives implemented by the companies surveyed to comply with working hour regulations. Based on this, an attempt is made to identify the overall picture of how labor unions have addressed this issue. The companies surveyed have labor unions, and these unions represent the majority of workers when concluding Article 36 agreements.

For transportation drivers, employers can extend the annual overtime work limit up to 960 hours by concluding an Article 36 agreement with special clauses.[12] The companies surveyed have concluded such agreements, while setting the overtime work limit equivalent to the legal limit (960 hours per year) to prepare for unforeseen circumstances, setting it close to the legal limit, or setting it at less than half of the legal limit to reduce overtime hours.

In any case, the Article 36 agreement that each of the companies surveyed concluded complies with the working hour regulations that became applicable to truck drivers in April 2024, and at the time of the survey, none of these companies had their workers engage in work for hours beyond the limit stipulated in the special clauses. Behind this is the companies' internal working hour management systems, which are designed to issue warnings when overtime hours are likely to exceed the limit stipulated in the Article 36 agreement. Furthermore, as shown in Table 2, at the companies surveyed, except for one of them,[13] labor and management review drivers' working hours regularly and, if any issues arise, discuss how to deal with them.

4.3 Issues and responses

(1) Issues related to continuous driving hours: Freight Transport Companies B, C, and D

Table 2. Initiatives implemented by the companies surveyed

Companies	Response to working hour regulations	Content of labor-management consultations on working hours
Freight Transport Company A	○	Labor and management review drivers' working hours once a month at the workplace, regional, and company-wide levels.
Freight Transport Company B	○	Working hour data collected from all business locations is reviewed at monthly labor-management consultations.
Freight Transport Company C (Branch S)	○	Working hours are discussed during labor-management consultations held every two weeks at the headquarters of Company C's labor union and once a month at Branch S of the union.
Freight Transport Company D (Branch N)	○	Appropriate action is taken if any violation of the Article 36 agreement occurs.

Note: A circle (○) in the table indicates that the existing Article 36 agreement complies with the working hour regulations that took effect in April 2024.

Table 3. Issues that occurred due to the application of working hour regulations and their causes

Companies	Issues arose	Causes
Freight Transport Company A	An issue related to daily working hours arose.	Difficulty predicting transportation volumes, where sudden increases in transportation volume lead to transportation delays.
Freight Transport Company B	An issue related to continuous driving hours and daily working hours arose.	Bad weather and increased transportation volume during busy seasons.
Freight Transport Company C (Branch S)	An issue related to continuous driving hours arose.	Road congestion, etc.
Freight Transport Company D (Branch N)	An issue related to continuous driving hours arose.	A large traffic congestion caused by snowfall.

Note: Issues related to continuous driving hours occur only rarely.

Issues related to continuous driving hours refer to the cases where drivers were required but unable to take a break of at least 30 minutes after driving continuously for four hours. Table 3 summarizes the issues that occurred and their causes.

Let us examine these cases. The freight transport companies surveyed formulate their operation plans on the premise of complying with working hour regulations, and as noted by Company B and Branch N of Company D below, issues related to continuous driving hours rarely occur. However, the companies sometimes cannot operate according to schedule due to such factors as bad weather, fluctuations in cargo volume (during busy seasons), and road congestion.

In such a situation, if drivers are compelled to drive for more than four hours continuously because they cannot park their trucks at rest stops on expressways (service areas or parking areas), the limit for continuous driving hours may be extended up to four hours and 30 minutes. As long as the total continuous driving hours remain within this extra limit, the extension beyond four hours does not constitute a violation of the Notice of Improvement Standards. Furthermore, while delays may occur due to bad weather or road congestion, these are considered unpredictable events, and the time required to address them can be excluded from continuous driving hours. Therefore, issues related to continuous driving hours are limited to those caused by fluctuations in cargo volume, and such issues do not occur frequently. Consequently, it can be said that they are not particularly serious issues.

[Company B]: "Although drivers, as a rule, must take a break after four hours of continuous driving, the reality is that several drivers continued driving beyond that limit due to irregular traffic congestion during the Golden Week, Obon, or other long holidays, when they were unable to take a break at rest stops."

[Company D]: "We are currently adhering to the continuous driving hour rule. However, there was one instance about two years ago when we were unable to comply with the rule due to snow. The drivers got stuck in the snow—or rather, had to drive at a snail's pace—and their continuous driving hours ended up reaching four hours and one minute."

(2) Issues related to hours on duty per day: Freight Transport Companies A and B

Hours on duty per day consist of working hours and break time. In principle, hours on duty for truck drivers are limited to 13 hours per day, but there are cases where the actual hours on duty exceed this daily limit. This issue occurred at Freight Transport Companies A and B.

At Freight Transport Company A, pickup delays on city routes are the reason drivers' hours on duty exceed the daily limit. Due to difficulty in forecasting the volume of cargo on any given day, high volumes result in longer pickup times, and these delays cause long-distance drivers responsible for inter-store routes to remain on duty for hours beyond the daily limit. These issues occur on 10% of all routes—specifically those extending for over 500 kilometers. At Company A, countermeasures are discussed at its monthly labor-management consultations.

At Freight Transport Company B, drivers' hours on duty also exceeded the daily limit due to increased cargo volumes during busy seasons. To address this issue, Company B reviews working hour data through monthly labor-management consultations and, if any issues arise, investigates the causes and considers countermeasures.

[Company A]: "When the volume of goods from each individual customer increases even slightly, it slows down the work of the pickup and delivery drivers who go around town picking them up. They return to the depot to load the goods onto trucks bound for destinations nationwide, but this process gets delayed. Everything is interconnected. Once pickups get delayed, the next day's deliveries get delayed as well, creating a vicious cycle where the delays just keep piling up."

[Company B] "This issue does not arise frequently, but it does occur during busy seasons. It happened recently, especially for beverages, around July and August, rather than September. Since it was particularly hot this year, we had to make trips to load shipments at (Company B's) beverage distribution centers, which caused a sudden surge in beverage shipments. When there is a large volume of shipments, a fair number of trucks inevitably concentrate on that task all at once. I think this occurred in five cases or so."

4.4 Relationships with partner companies

As shown in Table 1, the companies surveyed in the freight transport industry do not manage all transportation operations in-house. To a greater or lesser extent, Freight Transport Companies A, B, C, and D outsource part of their transportation operations to their partner companies. The freight transport industry operates on a subcontracting structure, in which partner companies are positioned as subcontractors. In this case, even if the companies surveyed comply with working hour regulations, their partners might not do so. Therefore, the focus here is on how the partner companies address compliance with working hour regulations.

Meanwhile, there is a growing movement, led by the Ministry of Land, Infrastructure, Transport and Tourism (MLIT), to establish appropriate transportation rates.[14] The companies surveyed are receiving requests from their partner companies to revise transportation rates. For the companies surveyed, considering the continuity of their business, there is a need to accept these requests for rate revisions; however, if they fail to reach an agreement with the partner companies, they may lose cooperation from these partners. In light of this, the section below will also discuss how the companies surveyed have responded to these requests for rate revisions from their partner companies, as well as the situation in which they are unable to secure cooperation from the partner companies and how they address such situation.

(1) Compliance with working hour regulations

Freight Transport Company A requires its partner companies to comply with working hour regulations, particularly regarding the daily limit for hours on duty. Since many of Company A's partner companies are relatively large companies, these partners already maintain proper working hour management. Furthermore, Company A does not assign transportation operations with unreasonable deadlines to its partner companies. When it is difficult to comply with the daily limit for hours on duty, Company A advises its partner companies to increase staffing, including hiring part-time workers, to address the issue; in practice, however, Company A's own drivers often help to cover the partners' driver shortages.

Like Company A, Freight Transport Company B sets delivery deadlines that allow its partner companies to comply with working hour regulations and requests that they adhere to these regulations. Furthermore, Company B has introduced a truck berth reservation system to reduce the partner companies' waiting time.

Freight Transport Company C has never outsourced unreasonable transportation operations to its subsidiary (Company D). Regarding the application of working hour regulations, Company C has held labor-management consultations to review the transportation operation process so that its subsidiary (Company D) can comply with these regulations. As a result, the maximum transportation time per trip was set at 12 hours (excluding a two-hour return trip for each transport company). Furthermore, through labor-management consultations, Company C clearly defined the continuous driving hours for both its own drivers and Company D's drivers as the period from when a driver leaves a branch office until they return to that branch office.

Branch N of Freight Transport Company D holds consultations with managers of its partner companies twice a year (once before the busy season) and requests these partners to comply with working hour regulations.

(2) Response for cost pass-through

The freight transport companies surveyed have received requests from their partner companies to raise transportation rates. These requests are driven by rising costs and wage increases for their own employees. In response to these requests, each company surveyed engages in negotiations to revise transportation rates.

Freight Transport Company A engages in negotiations with its partner companies to revise transportation rates, with a view to maintaining the continuity of its own business. The highest rate hike initially requested by one of these partners was a rise of about 10%, but following the repeated negotiations with Company A, the rate hike settled at around 5%. Company A also implemented measures, such as raising rates to market levels for the partners whose rates were below market rates, while increasing the rates by about 3% for the partners whose rates have recently been raised. At the same time, Company A requests that the shippers revise their transportation rates. This is to secure the funds needed to cover the wage increases for its own employees and the transportation rate hikes for its partners. Company A accepts orders from its shippers at rates amounting to only about 50 to 60% of the originally agreed rates, resulting in a significant gap between the agreed rates and the actual rates. However, some shippers, when asked to revise their transportation rates, either agree to only a small rate hike or refuse to agree to a rate revision.

Freight Transport Company B revises its unit fuel price once a month. The company sets a minimum unit price for diesel oil and pays that minimum unit price even if the actual fuel cost falls below it. The company also revises the unit labor cost once a year, considering recent increases in regional minimum wages and fluctuations in prices. Company B has been implementing these measures for some time. This is because Company B believes that the "prime contractor (Company B) must implement the initiative to engage with shippers on behalf of its group companies and partner companies."

In accordance with the head office policy, Branch S of Company C holds discussions (dialogues) with representatives of its partner companies at least once (or twice a year in the first and second halves of the year) regarding outsourced collection and delivery operations. Through these discussions, the branch addresses issues, such as the 2024 problem in freight transport, revisions to transportation rates in response to rising prices, and operational improvements.

Branch N of Company D responded to the requests from its partner companies to revise transportation rates. The branch addresses these requests for rate revisions during its annual guidance tours and when making individual visits to the partner companies. To date, the branch has revised the transportation rates for all of its partners (approximately 100 companies).

(3) Response to the return of outsourced operations

There are cases where a transport company's partner company returns the outsourced operations on transportation routes to the client company, that is, the client company cannot receive the partner's cooperation. The freight transport companies surveyed had faced such return of outsourced operations from their partners and have been experiencing it more frequently these days. This situation holds true for both city routes (short-distance transportation) and inter-store routes (long-distance transportation). The reasons behind the return of outsourced operations include labor shortages, a lack of successors, bankruptcy, and financial difficulties on the part of the partner companies. In particular, Branch N of Freight Transport Company D reported an increase in returns of outsourced operations following the implementation of the new working hour regulations.

To address the return of outsourced operations, the client companies may request their partner companies to increase staffing or may themselves take over the returned operations. While temporarily assigning its own drivers to the returned operations, a client company may approach other partner companies for assistance. If it is still difficult to complete the operations, the client company may consult with its competitors to seek cooperation from their partner firms. Through these measures, the companies surveyed are currently managing to maintain transportation services.

[Company D]: "As our partner companies are actually short-staffed as well, even for operations on routes we usually assign them, they tell us that they cannot conduct operations on weekends. This is because they have to allow their drivers to rest. Since May 2024, it has become more common to use different partner companies on weekends or have our own (Company D's) drivers cover those routes. For this year-end and New Year's period, we have already received a request for help from one of our partner companies, saying that it cannot operate starting on the 1st day of the year (New Year's Day) so it wishes to return the operations to us. Therefore, we are trying to manage our branch's staffing and manage the situation as best we can."

V. Conclusion

5.1 Key findings

The following summarizes the analysis results obtained through the case studies of the four freight transport companies. The analysis results cover four points: (1) responses of companies to the application of working hour regulations; (2) issues and responses seen after the application of working hour regulations; (3) regulations by labor unions; and (4) relationships with partner companies.

(1) Responses of companies to the application of working hour regulations

The companies surveyed took four initiatives to apply the new working hour regulations.

The first is to revise transportation routes. This was done by all the freight transport companies. The revision includes (1) reducing unloading time by decreasing or reorganizing unloading destinations, and (2) shortening time for a transportation service by using relay transportation. The revision allowed transportation to be completed within the daily limit for hours on duty, contributing to reducing the burden on truck drivers.

The second is to make requests to shippers. This initiative was conducted by Freight Transport Companies A, B, and D. Considering their business relationship, it is difficult for transportation service providers to make requests to their shippers. However, the three freight transport companies requested their shippers to reduce waiting times and revise timetables to comply with the working hour regulations, and their shippers accepted such requests.

The third is to develop support systems. The business territory for Branch S of Freight Transport

Company C includes residential areas with many cargo collection and delivery locations and mountainous areas with long distances between those locations, resulting in prolonged cargo collection and delivery times. The branch visualized the cargo collection and delivery status of each area to allow drivers in areas where their work is completed to provide support for other areas. This has led to a reduction and leveling of overtime hours for all drivers at the branch.

The fourth is to secure and develop rest facilities. Branch S of Freight Transport Company C has set up rest facilities in each area to ensure drivers' break time according to working hour regulations. Since the condition and availability of rest facilities is not uniform, however, not all drivers can take a break safely and securely. Therefore, Branch S of Freight Transport Company C is developing rest facilities at the request of Branch S of Company C's labor union.

(2) Issues and responses seen after the application of working hour regulations

The companies surveyed were trying to comply with the rules set forth in the Notice of Improvement Standards. In doing so, two issues arose (including potential ones). The following discusses the issues and responses.

The first issue is related to continuous driving hours. The continuous driving hours rule calls for limiting continuous driving to four hours and securing a break of at least 30 minutes from driving. The issue arose at Freight Transport Companies B, C, and D due to road congestion, bad weather, and increased cargo volume. Given that road congestion or bad weather are considered as an unpredictable event, the time spent responding to them may be excluded from continuous driving hours and that continuous driving hours rarely exceed the limit, however, the issue has fallen short of becoming serious.

The second issue is related to the daily limit for hours on duty. This issue occurred at Freight Transport Companies A and B. At Freight Transport Company A, drivers remain on duty beyond the daily limit as cargo pickup delays affect the entire transportation schedule up to delivery. Company A has identified the routes subject to the issue and is considering responses through monthly labor-management consultations. At Freight Transport Company B, drivers remain on duty beyond the daily limit as transportation volume increased in busy seasons. In response, Company B implemented measures such as requesting that its shippers reduce waiting times.

(3) Regulations by labor unions

While employers are responsible for managing working hours for their employees, labor unions at the companies surveyed are contributing to compliance with working hour regulations. The labor unions of the companies surveyed represent the majority of workers when labor and management conclude Article 36 agreements. At most of the companies, regular labor-management consultations are held to discuss working hours. Participants in such consultations not only check working hours but also consider solutions to any issues. At some of the companies, labor unions ask management to comply with working hour regulations. As indicated by earlier studies, labor unions participate in determining employees' working hours and contribute to compliance with working hour regulations.

However, it seems that regulations by labor unions may not necessarily be sufficient. This is because the labor unions of the companies surveyed, though trying to force the companies to comply with working hour regulations through procedural rules (e.g., the Article 36 agreements and labor-management consultations), are not necessarily contributing to the reduction of working hours. Among the companies surveyed, only Company C's Branch S was trying to reduce working hours through labor-management collaboration. Why are many of the companies surveyed failing to actively work to reduce working hours? As far as the survey is concerned, two reasons can be cited.

The first reason is that these companies want to avoid situations where working hour regulations cannot be complied with due to labor shortages or fluctuations in workload. If this is the case, the labor and management sides may conclude an Article 36 agreement with overtime work hours close to the ceiling. In fact, this occurs at some of the companies surveyed. The second reason is that working conditions are not good at these companies. As noted at the beginning of this paper, compared to other occupations and industries, motor vehicle drivers work longer hours yet receive relatively lower wages. Consequently, it is likely that motor vehicle drivers are willing to work overtime in order to maintain a certain level of income. In such cases, it is difficult for companies and their labor unions to reduce working hours.

(4) Relationships with partner companies

The freight transport sector that is the subject of this paper features the subcontracting structure. Generally, subcontractor companies tend to have business management difficulties and worse working conditions and environments for their employees. Subcontractors may hesitate to request their customers to revise contractual conditions, fearing that they could lose contracts.

However, when examining the relationships between the surveyed companies and their partner companies, freight transport companies are taking care not to force their partner companies to operate unreasonably and are accepting their partners' requests for revisions to transportation fares. One reason for this may be that freight transport companies may have difficulties in sustaining their business operations if their partner companies refuse to continue transportation services on some routes.

However, simply responding to requests from partners may not necessarily solve all problems. As shown in Figure 5, since many of its customers are small- and medium-sized enterprises, Freight Transport Company A may fail to lead its customers to accept its requests for revisions to transportation fares. On the other hand, Company A is requested by its partner companies to revise transportation fares, having no choice but to bear the cost of transportation fare revisions. In other words, Company A is caught between its shippers and partner companies. If this situation continues, Company A may fail to accept transportation orders from its shippers.

Regarding a company's relationships with partner companies, those partners, who are subcontractors, tend to attract attention. As seen in the Company A case, however, it is also necessary to revise transportation fares for companies that outsource operations to their subcontractors. To achieve this, it is considered necessary to promote understanding among shippers and customers and to engage both parties in the discussion.

5.2 Implications

Based on the analysis results explained above, the following four implications can be obtained.

The first implication is about issues that have arisen when it comes to complying with working hour regulations. Some issues occurred while the companies surveyed were striving to comply with working hour regulations. In the freight transport sector, issues arose regarding continuous driving hours and the daily limit for hours on duty, as well as daily business operations. These issues were not observed in connection with bus drivers and taxi drivers, the categories of drivers not addressed in this paper. This may be because motor vehicle drivers'

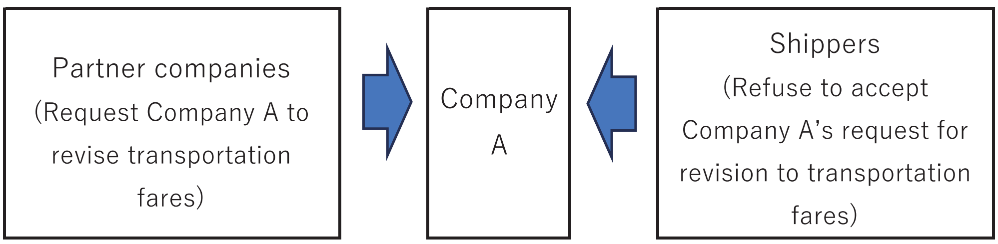


Figure 5. Relationships between Company A and its shippers and partner companies

way of working differs by sector. If these issues become more serious, therefore, sector-by-sector responses may become necessary.

The second implication is about the effects and issues of working hour regulations. The efforts of the companies surveyed indicate that, in order to comply with working hour regulations, they have revised their business operations and responded to relevant issues through labor-management cooperation. In other words, the enhanced working hour regulations have promoted business management efficiency and improved the working environment for workers. These results can be said to be the effects of working hour regulations. However, some issues have been seen. Issues that are not covered by the above case studies include an increase in workload on workers that emerged with the rise in labor intensity increased as a result of measures to divide work to allow workers to complete their work within the fixed time frame (Freight Transport Company C's Branch S). Another issue is that the overall business operation efficiency was impaired as it became mandatory to take a break after a certain amount of time in driving (Freight Transport Company D's Branch N).

The third implication is about obstacles to compliance with working hour regulations. As noted at the beginning of this paper, it has been pointed out that the freight transport industry has longer working hours and lower wages than other industries (Figures 1, 3, and 4), leading to chronic labor shortages. This may be an apparent obstacle to the optimization of working hours for truck drivers. To improve this structure, it is necessary to improve working conditions to increase the number of job applicants and raise wages to levels where drivers do not have to work overtime to secure sufficient income. Since certain financial resources are required for this purpose, however, how to secure the resources is an issue. In the current situation, companies are basically required to make efforts to do so. However, their efforts alone are insufficient. Other conceivable efforts include the implementation of programs to improve treatments for truck drivers[15] and the promotion of customers and shippers' understanding about higher transportation fares.

The fourth implication is about labor unions' contributions and issues. A labor union represents the majority of a company's workers for the conclusion of an Article 36 agreement, being involved in determining the working hours of the workers in the company. Labor and management at the company check employees' working hours through regular consultations and mutually serve as partners in enabling the company to comply with working hour regulations. In the context of regulatory compliance, the existence of labor unions can be viewed as effective for compliance with working hour regulations.

However, labor unions in Japan face two issues. One is that the regulatory power of labor unions is weak. Labor unions are actors in determining working hours and try to shorten working hours as pointed out in earlier studies. Among the companies surveyed, however, many have signed Article 36 agreements with special clauses but set working hours at levels close to the upper limit. This means that labor unions, though preventing employers from running counter to the Notice of Improvement Standards, have not contributed to the reduction of working hours. The second is a decline in the unionization rate. The estimated unionization rate for labor unions in Japan is about 16%, continuing a downward trend.[16] Therefore, it is necessary to seek other measures to reduce working hours. In this respect, the efforts of Freight Transport Companies A, B, and D can be used as a reference. These three companies made requests to shippers that successfully led to shorter working hours. The reason for shippers to accept such requests might have been that they were concerned that if their goods failed to be distributed, their business continuity would be affected. This applies not only to B2B business but also to B2C business. In order to resolve the problem of long working hours for motor vehicle drivers, it may be effective for their employers to cooperate with shippers and customers.

5.3 Future challenges

The final section points out two challenges to be addressed in the future. One challenge is the need to include small- and medium-sized enterprises (SMEs) as survey subjects. Since the study in this paper was conducted primarily through interviews with labor unions, all the companies surveyed were large companies. As earlier studies indicate, the freight transport industry operates under a subcontracting structure. It is generally considered that subcontractors and the workers employed by them are subject to harsher working conditions.[17] During the interviews, the companies surveyed were asked about the compliance status of their partner companies (subcontractors) regarding working hour regulations to the extent possible; however, because these are separate entities, sufficient information was not obtained.

Another challenge is the lack of information regarding annual working hours. Since the new working hour regulations took effect in April 2024, data on annual hours on duty or annual overtime hours for the 2024 fiscal year was not available. Furthermore, in order to grasp the full picture of working hour regulations, data analysis should also be conducted using government statistics. It will be necessary to conduct similar surveys in the future.

Notes

1. MHLW website, "Standards for Improvement of Working Hours of Motor Vehicle Drivers (Notice of Improvement Standards)," https://www.mhlw.go.jp/stf/seisakunitsuite/bunya/koyou_roudou/roudoukijun/gyosyu/roudoujouken05/index.html (accessed May 4, 2026).
2. Kumazawa (2010) examines cases of death from overwork (*karoshi*) that occurred in the late 1980s, revealing that drivers were working under harsh labor conditions. Shuto (2018, 2023) points out that the freight transport industry faces a mountain of problems, including labor issues affecting truck drivers, and that this has led to the current driver shortage. These observations are shared by Saito (2023), Yano (2024), Yonaga (2016), and Asai (2019).
3. Japan Trucking Association website, https://jta.or.jp/logistics2024-lp/ (accessed April 21, 2026).
4. For example, in the Expert Committee on Working Hours for Motor Vehicle Drivers, a sectional committee within the Labor Conditions Subcommittee of the Labor Policy Council that examined the appropriate framework for regulating motor vehicle drivers' working hours, executives from the following industrial labor federations participated as worker representatives: All Japan Federation of Transport Workers' Unions (Unyu Roren), the General Federation of Private Railway Workers' Unions of Japan (PRU), the Japan Federation of Transport Worker's Unions (JFT), and the National Federations of Automobile Transport Workers Unions (Zenjiko-Roren). Asai (2019) and Fukumoto (2023) explain—albeit limited to Unyu Roren—what kinds of statements were made by the representatives of the industrial federation through the council and subcommittee meetings during this period, and how the content of those statements was reflected in the outcomes. See https://www.mhlw.go.jp/stf/shingi/shingi-rousei_126973_00001.html (accessed November 14, 2024).
5. Miyoshi (2023) clarified this point through an analysis of corporate case studies.
6. Ujihara (1966) points out that in order to reduce working hours, it is necessary to consider securing the profit that could have been generated from the reduced working hours, through improved efficiency and time density in work.
7. Ministry of Health, Labour and Welfare (MHLW), *White Paper on the Labor Economy 2024: Responding to Labor Shortages*, https://www.mhlw.go.jp/wp/hakusyo/roudou/24/dl/24-1.pdf and Ministry of Land, Infrastructure, Transport and Tourism (MLIT), "Collection of Relay Transportation Case Studies: Keys to Success Learned from Best Practices," https://www.mlit.go.jp/jidosha/content/001479246.pdf (accessed December 1, 2024).
8. Based on materials provided by Company C's labor union.
9. MHLW, *White Paper on the Labor Economy 2024: Responding to Labor Shortages*, p. 67, https://www.mhlw.go.jp/wp/hakusyo/roudou/24/dl/24-1.pdf (accessed December 1, 2024).
10. Canon Marketing Japan Inc, website, https://canon.jp/biz/trend/image-dx-04 (accessed November 17, 2024).
11. Based on materials provided by Company C's labor union.
12. MHLW, Prefectural Labour Bureaus, and Labour Standards Inspection Offices, "Easy-to-Understand Explanation of Overtime Work Limit," https://www.mhlw.go.jp/content/001140962.pdf (accessed December 1, 2024).
13. Branch N of Company D's labor union states that there is no need for regular labor-management discussions, citing the following reasons: the parent company, Company C, has not outsourced any unreasonable work that would lead to violations of the Notice of Improvement Standards; although Company D's Article 36 agreement sets the overtime work limit close to the legal limit, overtime hours of the company's drivers have historically been short enough; and the union branch's executive serves as the operations manager and can monitor drivers' working hours in the course of their duties.
14. The MLIT established the standard fare system in 2022, in an effort to set appropriate transportation rates. See https://www.mlit.go.jp/jidosha/content/001732626.pdf (accessed December 3, 2024).
15. For a study discussing the programs to improve treatments implemented for nursery teachers, kindergarten teachers, care workers, and nurses, see Maeura (2023).
16. MHLW, Summary of FY2023 *Basic Survey on Labour Unions,* https://www.mhlw.go.jp/toukei/itiran/roudou/roushi/kiso/23/dl/gaikyou.pdf (accessed November 18, 2024).
17. Kobayashi et al. (2011a, 2011b) explore factors and challenges related to fatigue—which can lead to health problems—among long-distance truck drivers at small- and medium-sized enterprises (SMEs) through comparative

analysis with large companies. A common finding across these studies is that, compared to major transport companies, small- and medium-sized transport companies offer inferior working conditions and work environments.

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