# Korean Coal and Metal Mineworkers Mobilized in Wartime Japan:

# The Question of Wages and Ethnicity-Based Disparities \*

Lee Woo-Youn<sup>1</sup>

#### I. Introduction

hen one takes the position that mobilized Korean workers were forcibly removed and coerced into providing labor in wartime Japan (1937-1945), issues such as the wages paid to the mobilized workers and wage disparities with Japanese workers end up not being discussed, and become blind spots for researchers. Prior research that approaches the subject exclusively from a perspective of "forced removal of workers and forced labor" simply brushes away the issues considered in this paper by labeling them as the products of "slave labor and slave-like living conditions," even though they deserve to be examined in connection with the subject of mobilized labor.

Almost all published research on wartime-mobilized labor approaches the subject under the two assumptions of "forced removal of workers and forced labor" and "slave labor and slave-like living conditions." These assumptions create a significant obstacle for researchers trying to recreate what the work and daily lives of the Korean laborers must have been like. Researchers end up failing to look at the aspects of workers' lives in which the laborers demonstrated autonomy, as well as the wide-ranging and highly diverse events of daily life that may not accord with the narrative of "slave labor" and "slave-like living conditions." Perspectives of this type have consistently contributed to narrow the spectrum of subjects and topics in research on the history of wartime mobilized labor.

The following questions are examined in this paper to bring more clarity to the subject of mobilized Korean workers in wartime Japan. To what extent were wages actually paid to Korean mineworkers who were working in coal and metal mines? How were their wages determined? How large was the disparity in wages with Japanese workers? What was the trend in wartime wage disparities and how did wartime disparities compare to prewar wage disparities? By shedding light on these questions, this paper seeks to eliminate the obstacles that stand in the way of understanding the lives of mobilized Korean workers. However, as explained in this paper, research on the wages paid to Korean workers must cope with the critically important issues of remittances to family in Korea and forced saving. Specifically, were remittances to family being handled properly, and were workers able to withdraw money from their savings on their own discretion? If remittances and withdrawals from savings were being made against the will of the workers, the payment of high wages would prove to be meaningless. This matter shall be

<sup>\*</sup> This article was originally published in Japanese as 李宇衍「戦時期日本へ労務動員された朝鮮人鉱夫 (石炭、金属)の賃金と民族間の格差」『エネルギー史研究:石炭を中心として』 32, 2017-03-24. 63-87 頁

and was translated into English by the Japan Institute of International Affairs.

Ph. D in Economics at Graduate School, Sungkyunkwan University (2010. 5). Email: wooyoun@skku. edu

addressed in a future paper.

The present writer would like to point out that most of the materials used in this paper were compiled by researchers who adhere to the viewpoint of "forced removal of workers and forced labor." In Section II, an attempt will be made to examine the wage levels of Korean mineworkers (including those who worked at metal mines), and to see if, as widely believed, the miners were working for basically no wages or for a pittance. Section III will explain the formulas used for calculating wages by using examples from mines. Section IV compares the wages of Koreans and Japanese and will examine if discrimination in the payment of salaries based on ethnicity existed, as is commonly believed. Section V builds on the previous section's discussion and examines how wage disparities between Koreans and Japanese evolved during wartime, as well as contrasting the changes with disparities in the prewar period. The conclusion summarizes the points made in this paper and presents topics that deserve to be examined in future research.

#### II. Wage Levels

Labor mobilization and relocation of Korean workers to Japan began in September 1939 with the start of the "recruitment" of laborers. While it is frequently assumed that "wartime mobilized labor" was unpaid, this is not true. Wages were in fact paid under the mobilization program and continued to be paid under the "conscription" program launched in October 1944. The mineworkers examined in this paper were no exception, which leads to the questions of how and how much they were paid.

In 1940, shortly after the start of the mobilization of Korean workers, the Japan Mining Association [Nihon Kozan Kyokai] conducted a survey of Korean workers in 78 major mines (comprising both coal and metal mines; hereafter referred to as mines) throughout Japan. The survey covered such matters as "Instruction and Training Facilities" for civic education, "Work Conditions" of Korean workers, including wages, and "Remittance and Savings." The findings were published as a massive 300-page report entitled *Survey Report of Workers from the Korean Peninsula (Hanto-jin rodosha ni kansuru chosa hokoku)*. (Japan Mining Association 1940; Pak Kyong-Sik, ed., 1981, Vol. II, pp. 1-300) Table 1 presents data from the 46 mines that provided a full response on average monthly wage, and average savings and remittances per worker. The monthly cost of food was calculated by multiplying the daily cost by 31. For mines that did not provide information on the cost of food (indicated by an asterisk), the monthly cost of food was assumed to be 18.60 yen, calculated using the highest daily cost of food of any mine, which was 0.60 yen. The figures in the "Difference" column were calculated by subtracting savings, remittances and food costs from the average wage. The exclusion of food costs yields a high degree of dispersion, which indicates that wages, savings and remittances varied significantly among the

Regarding the wages of conscripted workers, the following explanation is given in *Kokumin choyo no kaisetsu* [Explanation of the national conscription system] (Yoshio Morita ed., Government-General of Korea, Mining Bureau, Labor Section, editorial supervision). "Question: Roughly, how much are conscripted workers paid? Answer: In the Japanese homeland, wages for respondents [persons responding to conscription] are controlled. Workers are categorized by type of work, region and age, and basically the same rate applies to workers in the same category. For example, in shipbuilding, about 60 yen is paid per month during the first three months. After three months, the rate rises to above 100 yen. In coalmining, excavators generally earn a maximum of about 6 yen [per day], a minimum of 3 yen, and an average of 4.50 yen. The rate does not fall below 2.50 yen even during the training period. Wages for respondents working in Korea are set to be somewhat higher than the general level of wages. It should be noted that all wages for conscripted workers in both the Japanese homeland and Korea are subject to the approval of the Government-General of Korea." (Kokumin Soryoku Chosen Renmei, 1944, pp. 42-43)

mines surveyed.<sup>3</sup> While this implies that the averages may be of somewhat limited significance, these figures will be used here, as no other data is available.

One point should be made at the outset regarding calculations. "Monthly average remittance" is not the average amount for all employed workers or workers who worked at the mine for at least one day in that month, but rather signifies the average amount for workers who actually made remittances. For example, consider the data from the Mitsui Sunagawa Coal Mine in the Sapporo District. As of the end of July 1940, the mine employed 622 miners, and an average of 279 miners made remittances during the four months between March and June (pp. 30-32). Calculating based on these figures, 44.7 percent of the miners remitted an average amount of 32.34 yen. Although it does not appear in Table 1, another notable case is the Akenobe Mine in the Osaka District. The response from this mine shows the average monthly number of miners working at this mine during the first six months of 1940 and the average monthly number of miners making remittances, indicating that 71.8 percent were remitting funds (pp. 98-101). Similar data is available for the Ikuno Mine, also in the Osaka District, showing that 72.8 percent were remitting funds (pp. 153-155). The response from the Takaya Mine in the Sendai District provides the average monthly number of miners and remitters during the months between March and July, indicating that 70.1 percent were remitting funds (pp. 54-54). A somewhat different picture emerges from a report compiled by the Institute for Science of Labor [Rodo Kagaku Kenkyu-jo] entitled Survey Report on the Working Conditions of Workers from the Korean Peninsula [Hanto romusha kinro jokyo ni kansuru chosa hokoku] (hereafter Survey Report). According to this, only 34.0 percent of the miners working at a coalmine in Hokkaido in 1941 were making remittances to their family in Korea. (Institute for Science of Labor 1943a; Pak Kyong-Sik ed., 1982, Vol. 1, pp. 373, 482) It is also reported that among miners working at the Sumitomo Konomai Gold Mine in Hokkaido in early 1943, only 20 to 30 percent were remitting funds. (Tadashi Kosho 2011, p. 358) It may be possible to explain the differences in the ratio of remitters as follows. The data in Table 1 was gathered immediately after the start of wartime labor mobilization, implying that the Korean workers were still unfamiliar with their work and work conditions and were easily pressured by employers to make remittances. By contrast, the lower ratios reported in the Survey Report and by Kosho reflect the possibility that workers were rejecting the solicitation of employers and were remitting funds on their own.

It is well known that the cost of food, as well as savings, were withheld from wages. Moreover, because savings mostly constituted forced savings, it is very likely that the amounts of savings appearing in Table 1 were withheld from wages. When remittances are subtracted, the average remaining balance (difference) comes to 18.50 yen, which is equivalent to 25.7 percent of the average monthly wage of 71.95 yen. While the balance is obtained by subtracting savings, the cost of food, and remittances from monthly wages, other amounts were also being deducted for such items as taxes, utilities, rationed goods, clothing and monthly installment payments. According to data for 1944, amounts deducted for these items came to about 16.7 percent of wages. (Table 2) To summarize these figures, 18.6 percent of wages were withheld as savings, 21.2 percent for the cost of food, 16.7 percent for taxes and other items, and 25.7 percent for remittances. Thus, a total of 56.5 percent was being withheld or deducted from wages, meaning that any miner making remittances was doing so out of the remaining 43.5 percent. Furthermore, the data for 1940 shown in Table 2 indicates that remitters were sending the equivalent of 34.5 percent included in the remaining 43.5 percent and were spending the equivalent of 9.3 percent on personal

Wages for Korean coalminers also varied significantly among mines during the 1920s. See Chong Jin-Song (1989).

<sup>&</sup>lt;sup>4</sup> As the number of participants in forced saving programs is thought to be roughly equal to the number of employees or workers on payrolls, this issue can be ignored.

expenditures. On the other hand, it can be calculated that those who did not remit funds retained 43.5 percent of their wages for spending at their own discretion.

Although the above estimates are based on fragmentary information, they do not differ significantly from materials published in the past. The following can be confirmed from the information summarized in Table 2. There is very little difference in the ratio of monthly wages saved and remitted by workers at the Hitachi Mine in Ibaraki Prefecture between 1940 and 1941. The figures for 1944 depict the breakdown of expenditures for an average coalminer in the Kyushu District, whose daily wages ranged between 7 and 8 yen and monthly wages amounted to 150 yen. A comparison between 1940 and 1944 points to a slightly lower remittance ratio and a higher balance ratio. Other than that, there are almost no differences in deducted amounts and other ratios. The figures for 1945 are based on materials from the Sumitomo Inaushi Mine that report on wages earned, deducted amounts and remittances made by 44 Korean workers during a four-month period. Average amounts for these three items are shown in Table 2. It is notable that here again, no significant difference can be found in the breakdown of expenditures between 1940 and 1945.<sup>5</sup>

In other words, although Table 2 was compiled from different sources, the consensus is that even after subtracting forced savings, food costs and other expenses, workers were left with at least 40 percent of their wages as disposable income. Because workers were keeping more than 40 percent of their wages as disposable income, employers pressured workers to make remittances to their families. However, many Korean workers did not comply, simply because they preferred to spend their money locally. It is believed that decisions on fund remittances were the subject of very intense arguments between workers and on-site personnel managers who doubled as the dormitory masters where the workers were housed. The abovementioned *Survey Report* that investigated 14 mines touches on this matter in a section entitled "Promoting Savings," which contains the following entry regarding "Coalmine B." "Monthly wages are paid by the dormitory master. The practice is to reach an agreement on how much would be saved and remitted, whereupon workers are handed their remaining balance." (Pak Kyong-Sik ed. 1982, Vol. 1, p. 4716)

Prior research states that workers received nothing or very small amounts of "pocket money" because all or most of the wages were withheld for forced savings, various types of installment

Table 2 was compiled to examine the breakdown of wages and expenditures, but this table cannot be used in discussing trends in wartime wages. Coal and metal mining wages were continuously rising. The "Price Freeze Order" of September 19, 1939 prohibited any further increase in prices, rents, charges, transportation charges, wages and salary. Thereafter, the order was renewed every year. (Cohen 1949, pp. 358-359) Wages were controlled after March 1939. However, due to chronic labor shortages, businesses found other ways to raise wages to attract workers. That is, aside from controlled wages, businesses paid a wide array of allowances that included temporary allowance, family allowance and long-term employment allowance to effectively raise wages. (Akira Hara 1976, p. 242) Wages were raised to retain workers and, as a result, the average daily wage for men increased from 3.08 yen in 1940 to 5.676 yen in 1944. (Cohen 1949, p. 166)

Another example can be found in Coalmine A where records state, "Wages are paid through the dormitory master, but no more than 10 yen per month is handed to workers. Workers are made to save or remit the remainder. (Interest on company savings is 6.5 percent per annum.) In some cases, workers have returned home at the end of their two-year contract with 1,300 yen in savings. The 10 yen of pocket money is mostly spent on food, drink and gambling. Some workers purchase clothes." Another example is Coalmine C where records state, "All wages were paid through the dormitory master. As a rule, pocket money was kept within 10 yen per month, and the remaining money was allocated to savings and remittance (as a rule, remittance amounted to no more than 20-30 yen." The "10 yen rule" was regularly applied to workers with a positive attitude toward remitting funds, but the company probably had nothing it could do with workers who did not remit money. On the other hand, Table 1 shows that the upper limit of the "rule" on remittances was also not always obeyed.

savings, food costs and other expenses, and concludes that workers had no possibility of making remittances. However, more than 40 percent of wages remained in the hands of workers after the deduction of forced savings and other items. Of this remaining amount, workers made remittances to their families either on their own discretion or under pressure from personnel managers, or otherwise spent the money locally. On July 19, 1939, Particulars Concerning Implementation of Above Guidelines [Migi no yoko toriatsukai ni kansuru saimoku] ("Above Guidelines" refers to Guidelines on Recruitment of Korean Workers [Chosen-jin rodosha boshu yoko]) was announced. From this date onward through the end of the war, the general rule was that "with the exception of minimal amounts, all wages must be remitted or saved." (Particulars Concerning Implementation of Above Guidelines) [Chosen-jin Kyosei Renko Jittai Chosa Hokokusho Henshu Iinkai] ed. 1999, p. 43). However, due to the resistance of Korean workers, this rule was not enforced. Deductions included the costs of work clothes and food, but rent was not charged to those who lived in the dormitory for single workers. Money remaining after the deduction of necessary living expenses and savings, if not remitted, was spent on such items as clothes, various food items, gambling, alcohol and tobacco. Details of such expenditures will be discussed in a future paper.

Pak Kyong-Sik quotes the account of a worker who was mobilized in 1941. "When I arrived at my work after being conscripted, I found that my wage was 1.30 yen, which was only half the amount advertised. My plans immediately fell through. There was no way I could think about remitting funds because I barely had enough to feed myself." (1965, p. 87) Shigeru Nagasawa writes in his study of the Joban Coalmine in Fukushima that little money was left after the cost of food and other expenses were deducted. "After paying for daily necessities and after money was withheld for the company's forced savings, there was absolutely no room left for the Korean workers to send money home. And if there was some money left, it was a very small amount." (1977, p. 131) In his study of the same region, Shoji Yamada writes, "Wages were withheld for forced saving and the workers only received a small amount of pocket money. The intent was to prevent workers from escaping to distant places." (1978, p. 650) Eidai Hayashi claimed, "Out of the wages that they received, workers paid for food (0.60 – 0.65 year per day), bedding, cigarettes, alcohol and soap. The rest was taken away for Patriotic Savings, savings for retirement, normal savings, national bonds and forced savings. As a result, not a single cent was paid to the workers." (1991, p. 36) Cook and Cook also quote the account of a mobilized worker. "Wages? They didn't pay us anything. When we were coming from Korea, they told us we would receive 1.50 yen. But we weren't paid even for a single day of work." (1992, p. 196) Kim Moon-Young takes a more flexible position than the foregoing researchers and says that, after various expenses were deducted, "Not much was left to be paid to the workers. Not very many workers were able to remit more than the remittable amount of 15 yen." (1995, pp. 86-87) While there is evidence of restrictions being placed on remittance amounts, it remains unknown whether such restrictions were commonplace. Kim In-Dok writes, "Rarely did workers receive any money from their employers. It appears this was the general rule... Even if monthly wages were received, the amounts were extremely small. Generally speaking, workers only received a small amount of pocket money from their employers." (2002, pp. 49-50) Chon He-Gyon quotes the account of a mobilized worker as follows. Regarding monthly wages, "What was paid to us was so little it would be finished with a single day's outing." Based on this he writes, "It can be concluded that they received a small amount of pocket money each month." (2006, p. 171) Ho Kan-Mu directly quotes the oral account of a Korean worker. "The monthly wage was no more than pocket money. So, we could not even think about sending money home." (2014, p. 64) Unlike the foregoing researchers, Chon Gi-Ho expresses doubts about whether the remittances made by Korean workers were properly paid to their families. (2003, pp.113-114) I San-Wi proposes the theory that remittances that had not been made were included in the unpaid amounts held in deposit after the end of the war. (2014, p. 61) As noted above, the present writer plans to address issues related to remittances to families in Korea and unpaid amounts in a future paper.

#### III. Methods for Calculating Wages

The methods used in calculating wages are discussed in this section with a focus on coalmines. As attested to by Eidai Hayashi, "While wages differed among mines, extremely complex methods were used for calculating the wages of miners." [Hayashi 1991: *Bibliography* [*Kaidai*], p. 34] The most detailed explanation of wage calculation methods is provided by the Institute for Science of Labor (1943b) in *Korean Peninsula Workers in Coalmines* [*Tanko ni okeru hanto-jin romusha*], the contents of which can be summarized as follows. First of all, "new arrivals" underwent "three months" of training during which they were paid a flat daily amount. At the end of this period, workers were assigned to such tasks as excavating, tunneling, loading and hauling. For these tasks, wage rates were normally based on the value of group output. Finally, workers were paid a flat daily amount for such tasks as machine operation, machining, coal washing and miscellaneous tasks. Output-based wage calculation for excavating, tunneling and related tasks is explained below. Output-based wage calculation for excavating, tunneling and related tasks is explained below.

(1) Determining the total wage pool: For excavating, the total wage amount was calculated by multiplying a per-ton value by the net tonnage of coal produced. For tunneling, the total wage pool was calculated by multiplying a per-tsubo (approx. 3.3 m2) value by the total area cleared (in tsubo). (2) Adjusting the total wage pool: A fixed bonus amount was added for every cart exceeding a previously determined production norm. When miners performed any another task, the relevant amount would also be added to the total wage pool. When a decline in production tonnage was anticipated due to the assignment of National Labor Volunteers [Kinro Hokoku Tail or new recruits, a certain amount was added to the total wage pool under the heading of "Compensation for Diminished Skill." Additions were also made to the total wage pool when large numbers of Korean workers were mixed into the teams, or allowances were added to the wage pool for training or accompanying newly recruited unskilled miners. (3) Determining the per-ton value: Starting with the valuation on the labor portion of per-ton production cost, various factors were taken into consideration in determining the per-ton value of coal produced. First, consideration was given to maintaining a balance with wages paid for other tasks. Second, consideration was given to seasonal factors that made mining more difficult. Third, consideration was given to diminished output when excavation reached a poor-quality working face or vein. (4) Determining the production tonnage: Production tonnage was calculated based on the number of coal-filled carts removed from the mine. The weight of coal per cart was estimated by sight. (It is reported that estimation by sight varied very little from actual measurement.) A fixedrate downward adjustment was made in the number of carts when the loads contained large amounts of inferior-grade "waste." (It should be noted that some Korean workers suspected that the carts were not being properly counted.) (5) After calculating the total wage pool using the

Between 1939 and 1945, a total of 144,004 Korean workers were mobilized and assigned to mines. Of this number, 121,574 workers (84.4 percent) worked in coalmines. It is reported that, among such coalminers, a great many of them worked inside the mines as excavators. (Lee Woo-Youn 2015, p. 6)

<sup>&</sup>lt;sup>9</sup> In Japanese, this system is referred to as *dantai dekidaka-barai seido*. Following the example of Chon Jin-Song, *dekidaka-barai seido* has been rendered as *seisan daka chingin seido* [output-based wage rate] in this paper. The term *dantai* has been added because, as outlined below, the aggregate wage for the entire work group was first determined, and this aggregate amount was then allocated among individual workers.

According to the Editorial Committee of the Survey Report on the Forced Removal of Koreans (1999, p 299), wages at metal mines were as follows. Wages for workers working inside the mines were determined on a contract basis (output-based wage rate), while flat-rate wages were paid to those working outside the mines. These arrangements applied to both Korean and Japanese workers. During the training period, a "temporary employment" wage was paid, amounting to 1.20–1.30 yen. After the end of the training period, performance pay was added according to the type of work assignment.

above methods, wages were allotted to individual workers based on fixed ratios that took into consideration each individual's skill level and work assignment. The ratios calculated by on-site supervisors were referred to as *buritsu*, or "rate." For instance, assume that rates ranged from a minimum of 10 to a maximum of 16. Each worker was then given a rate, and the individual's wage was calculated based on his rate. (Institute for Science of Labor 1943b, pp. 769-770)

The calculation process can be shown using the following example. Assume that on the day of measurement, output came to 247 carts with a per-cart value of 0.75 yen. A total of 20 carts were deducted for "waste", 1.9 carts were deducted for carrying less than the specified load, and 0.6 carts were added for carrying more than the specified load. As a result, net output equaled 226.15 carts (243 - 20 - 1.9 + 0.6), so that the total wage pool came to  $162.83 \text{ yen } (0.75 \times 226.15)$ . Assuming that National Labor Volunteers were working in the mines on this day, compensation is made for diminished productivity at the rate of 0.20 year per cart. Hence, the total compensation amount for diminished productivity comes to 45.20 yen (0.20 x 226.15). Next, a training allowance of 0.30 yen is paid per inexperienced National Labor Volunteer, so that a training allowance of 5.40 yen (0.30 x 18 volunteers) is added to the wage pool. After deducting 21.42 yen for the cost of explosives used on this day, the total wage pool comes to 192.01 yen. This total amount was divided among the workers based on the following calculation method. Assuming that a Japanese worker, 16 to 18 years old with at least one month of experience, has a skill level of 10 points, the worker with the lowest skill level who worked on this day is given a skill score of 11.5 points and the worker with the highest skill level is given a skill score of 16.0 points. Adding the skill points for all workers yields 588.4 points in total. Based on this, the wage payable per skill point is 0.328 yen (192.01 ÷ 588.4). Hence, the least skilled worker with a skill score of 11.5 points received 3.77 yen (0.328 x 11.5), and the most skilled worker with a skill score of 16.0 points received 5.25 yen (0.328 x 16.0). (Institute for Science of Labor 1943b, pp. 770-771)

While the same wage scale was applied to both Korean and Japanese workers, this complicated calculation method potentially gave rise to misunderstandings. In addition, the assessment (calculation) of the rate and other factors created room for ethnic discrimination. A review of disputes arising between Korean workers and their employers shows that wage disputes occurred frequently during 1939 and 1940, but decreased to nearly zero after 1941. (Editorial Committee of the Survey Report on the Forced Removal of Koreans 1999, p. 254) On the other hand, food-related disputes increased as dietary conditions deteriorated. Both the Government-

According to *Hokkaido and Korean Workers* [*Hokkaido to Chosen-jin rodosha*] compiled by the Editorial Committee of the Survey Report on the Forced Removal of Koreans (1999), wage calculations were complex, and its structure gave rise to suspicions that wages were subject to ethnicity-based discrimination. (p. 253)

According to *Hokkaido and Korean Workers*, with the passage of time, Korean workers "came to understand" that wages differed depending on "diligence" and "capability" (the individual's muscle power). (p. 254) It can be judged that this was not so much the result of gaining a better understanding of the wage system, but rather reflected the development of a certain relation of trust between Korean workers and their employers on matters related to wages. Another cause of wage disputes was that recruiters had quoted the highest standards of pay to prospective recruits. But once they arrived at their work, they found that wages were output-based or were flat daily rates. (Ministry of Justice, Criminal Affairs Bureau 1941, p. 1,233) According to *Hokkaido and Korean Workers*, during January–December 1944, there were 134 cases of labor disputes in Hokkaido involving immigrant Korean workers (10,166 participants). The largest number (48 cases) pertained to labor management issues (of which 24 involved use of violence). The second largest number (27 cases) pertained to contract extension issues and return to Korea (of which 23 involved opposition to contract extension). Also tied for second (27 cases) were cases pertaining to food and medical issues. (p. 1,593) Wage-related disputes were frequent during the beginning of this period, but totaled only 7 cases (200 participants) in 1944. (p. 326)

General of Korea and the Japanese government were aware of these issues. On February 13, 1942, the "recruitment" system of labor mobilization was replaced by "government-mediated recruitment." At this time, the Ministry of Welfare and the Ministry of Labor issued *Guidelines on Training and Treatment of Incoming Workers* [*Inyu romusha kunren toriatsukai yoko*], which contained the following provision. "Workers shall be made to fully understand in advance that individual wages will differ according to individual efficiency and diligence." (Ministry of Welfare and Ministry of Home Affairs 1942, p. 77) *Guidelines on Mediated Recruitment of Workers Relocated to the Homeland* [*Naichi inyu assen yoko*] dated February 20, 1942 and issued by the Government-General of Korea contains the following provision. "In particular, terms of employment shall be thoroughly communicated... Have workers fully understand and accept that individual wages will naturally differ according to ability." (Maeda 1943, p. 51)<sup>13</sup>

Yutaka Nishinarita makes the following statement based on materials from the Sumitomo Konomai Gold Mine in Hokkaido for 1942. "Non-payment of wages was by no means the exception." (Nishinarita 1997, p. 277) The material used by Nishinarita is reproduced here as follows.

Date: July 8, 1942

From: Kiyoji Kimura, Chief Administrator of Gongju-gun, Mokdong-myeon,

To: Director of Sumitomo Konomai Gold Mine

Re: Request on Payment of Worker's Wages

··· This is in regard to a complaint filed by the worker named below who was employed by your company on March 22, 1940 and departed your company at the end of his term of employment on April 27, 1942, at which time he returned to his place of origin. The complaint states that his wages could not be precisely determined and paid at the time of his departure due to the hassle, and that he was given verbal assurances by the personnel manager during his voyage back that unpaid wages for 24 days would be remitted to him at a later date. Although two months have passed since his return, he has yet to receive any remittance. The worker has on several occasions requested that this matter be pursued. While knowing well that you are busy, we request that you investigate this matter and inform us of your findings.

Worker in question: Chungcheong-do, Gongju-gun, Mokdong-myeon, Iin-ri Che Geum-Ok

Nishinarita takes the above description "wages could not be precisely determined and paid" as proof that "wages payable to Korean workers were very sloppily managed." However, it should be noted that the above case involves the settlement of outstanding wages after the end of the term of employment, and is not a problem that arose during the period of employment in the mine. It is also important to note that, since the start of the mobilization of Korean workers in 1939, employers were required to file monthly reports with local government authorities regarding the work performed by Korean workers, living conditions, wages and other matters related to labor

Accounts from mobilized workers also contain statements that, "The more you worked, the more you were paid." (Nittei Kyosen-ka Kyosei Doin Higai Shinso Kyumei Iinkai [Investigative Committee on Victims of Forced Mobilization under Occupation by Imperial Japan; hereinafter, Investigative Committee] 2005, p. 287; 2007a, pp. 109, 159, 551; 2009, p. 164)

management. This requirement came into effect pursuant to a directive dated July 29, 1939 issued jointly by the Vice Ministers of the Ministry of Welfare and the Ministry of Home Affairs. Entitled Guidelines on Recruitment of Korean Workers [Chosen-jin rodosha boshu yoko], the directive was forwarded to all local authorities. Concurrent to this directive, Particulars Concerning Implementation of Guidelines [Toriatsukai ni kansuru saimoku] (Editorial Committee of the Survey Report on the Forced Removal of Koreans, 1999, p. 44) and Procedures for Recruitment of Korean Workers [Chosen-jin rodosha boshu tetsuzuki] (Investigative Group on the Truth of Forced Removal of Koreans ed. 1974, p. 622) were issued, which specified the obligations of employers. On the same day, Administrative Procedures for the Immigration of Korean Workers to the Homeland [Chosen-jin rodosha naichi iju ni kansuru jimu tetsuzuki] was issued, which required all employers to file monthly reports with the local chief of police regarding work conditions, wages, savings, remittances and other matters. (Sumitomo Utashinai Mine 1940, pp. 15-16) Under these conditions, it would have been impossible to systematically avoid payment of wages to Korean workers.<sup>14</sup>

It is also important to note that Che Geum-ok, the Korean worker in the case cited above, went to the local government office to complain that his wages had not been remitted to him, whereupon the local administrator issued a formal letter explaining the background of the case and sought a response from the employer. Yoshihiko Moriya refers to a case where remittances from Japan had not reached family members, which resulted in an exchange of letters between the local government office and the Sumitomo Konomai Gold Mine (1996, pp. 134-135), leading one to believe that in this instance also, a response was received from the mining company. Because employers were obligated to file monthly reports with local government authorities on the payment of wages to Korean workers, it can be said that an established procedure was in place for resolving problems related to the non-payment of outstanding wages. The case cited by Nishinarita should not be interpreted to mean that wages payable to Korean workers in Japan "were sloppily managed." Instead, the case should be taken as evidence that the payment of wages was systematically managed and implemented. The marks of systematic management can also be seen in a survey conducted in 1942 of Korean workers employed in a certain mine. Asked what they looked forward to, the leading response was "payday." [Sangyo Rodo Chosasho 1942, p. 18] Given the materials currently on hand, this would be the most rational interpretation. The discovery of new materials related to coal and metal mines may very well enable us to more accurately describe the diverse conditions that existed.

Due to changes in the war situation, all gold mines were closed in 1943, and the Korean workers employed at the above-mentioned Sumitomo Konomai Gold Mine were relocated to coal mines in the Kyushu area. Chon He-Gyon has focused on matters related to wages in the context of this relocation. Chon pointed out that wages, allowances and savings ranging across 18 to 20 items were settled and paid to the workers, and argued that the regulations related to wages and other matters during the process of relocation prove that there was "coercion." [2011, pp. 574-575] This argument is difficult to understand as it provides no basis for why the settlement and payment of these amounts could be proof of "coerced labor." It is quite clear that this case, too, should be interpreted as evidence of systematic management of wage payment as was the case described above. For example, Moriya points out that Korean and Japanese workers were treated

The following is an account of a worker relocated to Sakhalin in 1941. "Question: Did you receive your unpaid wages when you were leaving? Answer: Where I was working, if you did your work, they would pay you for that month. They paid the monthly amount, and never failed or refused to pay. Question: Were you paid for all the work you did? Answer: Yes, for every month that I worked, I was basically paid in the same month." (Investigative Committee 20071, p. 159)

equally in the settlement of wages, allowances and savings in the process of relocation, with the exception that Korean workers received a relocation allowance equal to three months' wages that was paid as a severance allowance, as well as leave pay, food and drink allowances, and parting gifts. [1991, p. 29]

#### IV. Wage Disparities Between Korean and Japanese Workers

Wages were paid to Korean workers throughout the entire period of the mobilization and relocation of Korean workers to Japan. This began with "recruitment" in September 1939 and continued through "government-mediated recruitment" introduced in February 1942 and "conscription" instituted in September 1944. Rules pertaining to "recruitment" were set down in the directive dated July 29, 1939 issued jointly by the Vice Ministers of the Ministry of Welfare and the Ministry of Home Affairs and addressed to all local government authorities under the title of Policies Pertaining to the Immigration of Korean Workers to the Homeland [Chosen-jin rodosha naichi iju ni kansuru hoshin] (Editorial Committee of the Survey Report on the Forced Removal of Koreans 1999, p. 493) This document instructs Japanese employers to "avoid as much as possible any discrimination in the treatment of Korean workers as compared to homeland workers."15 The mobilization of Korean workers through "government-mediated recruitment" was announced in the Cabinet decision of February 13, 1942 entitled Policies Pertaining to the Employment of Korean Workers [Chosen-jin romusha katsuyo ni kansuru hoshin] (pp. 24-25), which contains the following directive. "At all levels, there shall be no difference in the treatment of such workers as compared to homeland workers." Finally, the same can be said for the rules on "conscription," which emphasized that "There is absolutely no discrimination between homeland and Korean workers in wages and in all other matters." (Kokumin Soryoku Chosen Renmei 1944,

On the same day, a joint directive was issued by the vice-ministers of the Ministry of Welfare and the Ministry of Home Affairs to local government authorities. Attached to Guidelines on Recruitment of Korean Workers [Chosen-jin rodosha boshu yoko], this directive was entitled Administrative Procedures for the Immigration of Korean Workers to the Homeland [Chosen-jin rodosha naichi iju ni kansuru jimu tetsuzuki]. Article 13 of this directive instructs that, "There must be no manner of discriminatory treatment compared to homeland workers." (Hajime Maeda 1943, p. 31) The same phrase ("There must be no manner of discriminatory treatment compared to homeland workers") is repeated in Particulars Concerning Implementation of Above Guidelines [Migi no yoryo toriatsukai ni kansuru saimoku] attached to Guidelines on Recruitment of Korean Workers [Chosen-jin rodosha boshu yoko]. (Chosen-jin Kyosei Renko Jittai Chosa Hokokusho Henshu Iinkai ed. 1999, p. 43) Guidelines on Recruitment of Korean Workers was issued in September 1939, and included the provision that there must be "no discriminatory treatment compared to homeland workers." (Investigative Group on the Truth of Forced Removal of Koreans ed., Chosen-jin kyosei renko kyosei rodo [Forced removal and forced labor of Koreans] 1974, p. 621)

The same is repeated in *Guidelines on Training and Treatment of Incoming Workers* [*Inyu romusha kunren toriatsukai yoko*], issued by the Ministry of Welfare on the same day, and in *Guidelines on Mediated Recruitment of Workers Relocated to the Homeland* [*Naichi inyu assen yoko*] that was issued by the Government-General of Korea on February 20, 1942. These documents both state, "Due attention shall be paid to avoid any sense of discrimination." (Shigeru Nagasawa 1992, Vol. 2, p. 76; Pak Kyong-Sik ed. 1976, Vol. 4, p. 1,254)

pp. 41-42)<sup>17</sup>

Reports also can be found from individual mines stating that no wage discrimination existed between Korean and Japanese workers. A total of 52 mines responded to the Survey Report of Workers from the Korean Peninsula outlined in the preceding section. (pp. 1-300) Among these, a total of 21 mines either responded explicitly that "no difference whatsoever existed between the treatment of Korean workers" and Japanese workers, or stated that the "same treatment" was accorded to Korean and Japanese workers. Needless to say, this means that both groups were subject to the same wage schedule, and not that everyone received the same amount. The 1940 Notice on Terms of Employment [Shugyo annai] of the Sumitomo Utashinai Mine (coalmine) states that, "wages shall be based on performance [output level]." (Sumitomo Utashinai Mine 1940b, p. 22) The Rules of Employment [Shugyo kisoku] of the Iwaki Mine contains the following: "3. Factors determining wages (1): Wages... shall be calculated based on predetermined unit value and output... Wages for jointly performed tasks shall be calculated... proportionately." (Shigeru Nagasawa 1987, p. 168) The point that the above *Notice on Terms of Employment* and Rules of Employment have in common is that no distinction is made between Japanese and Korean workers. The fact is that no document exists to show that the two groups of workers were treated differently. 18 According to the Sumitomo Utashinai Mine's Terms Requested and Answer to the Terms Requested (Collection of Occupation Forces-related Materials [Shinchu-gun kankei tsuzuri]), Korean workers who went on strike after the end of the war demanded that they be paid "an additional 0.50 yen to compensate for the fact that they were receiving 0.50 yen less than Japanese workers during the war." The company responded to this demand by stating that no difference in wages existed between Korean and Japanese workers, and that wages were calculated on the basis of experience, skill, and amount of work performed. (1945, pp. 415-417) Following this response, this matter was never brought up again.

Materials of the Tokyo District Mining Association regarding the Sado Mine (metal mine) state that the mine, "in compliance with government policy, adopted a non-discrimination policy in the treatment of Korean and Japanese workers." The treatment of Korean workers is stated to be the same as "homeland workers." [p. 147] The method for calculating wages is explained as follows. "Most of the workers from the Korean Peninsula work at jobs inside the mine. As is the case with homeland workers, wages for Korean workers working inside the mine is calculated based on output volume and a unit value that is calculated in advance based on such factors as age, experience, type of task performed and difficulty of task. The few Korean workers working outside the mine are paid a flat wage." (p. 150) Writing in the same year, Hajime Maeda, the head of the personnel department of the Hokkaido Colliery & Steamship Company, reported that there was no wage disparity between Japanese and Korean workers, and that wages were determined based on levels of diligence and skill. (1943, p. 149)

Documents of the Japanese government, the Government-General of Korea and individual mines all state that there was no wage discrimination based on ethnicity. But were these claims accurate? Is it possible that Korean workers were being paid less than their Japanese counterparts for performing the same tasks? The first researcher to give an unambiguous answer to this question was Pak Kyong-Sik. (1965) His work continues to be regarded in academic circles

<sup>&</sup>quot;Application for Requisition" filed by the Hokkaido Colliery & Steamship Company with the Ministry of Munitions and the Government-General of Korea contains a section entitled "Wages for Conscripted Workers," which states, "Workers conscripted under the provisions of Article 18-2 of the National Requisition Ordinance shall receive wages in accordance with the Ministry of Welfare's *Regulations Concerning Wages of Conscripted Workers*. ("Application for Requisition" reproduced in Yoshihiko Moriya 1995, p. 40)

Letter of Shigeru Nagasawa cited by Munehiro Miwa.

as representing the mainstream of research and constitutes the generally accepted theory. Pak Kyong-Sik draws his conclusions from the information summarized in Table 3, which outlines the distribution of wages (monthly wages) by ethnicity in a Hokkaido coalmine. The source of this information is the survey conducted by the Institute for Science of Labor between January 15 and February 7, 1942, the results of which were published as *Survey Report of Working Conditions of Korean Peninsula Workers*. The information used by Pak Kyong-Sik is drawn from page 90 of the *Survey Report*, which provides data on Coalmine D. (Pak Kyong-Sik ed., 1982, Vol. 1, p. 90)<sup>19</sup>

Table 3 shows that 82.3 percent of the Japanese workers received wages exceeding 50 yen, while 75.0 percent of the Korean workers earned less than 50 yen. Based on this information, Pak Kyong-Sik concluded that Korean workers received about half the amount received by Japanese workers and argued that this was proof of "ethnic discrimination." This table is cited again in the "Summary Table" [Sokatsuhyo] appearing on pages 173-174 of the Survey Report. However, immediately before this table, "Korean Workers: Number of Years Employed" [Chosen-jin kinzoku nensu] and "Japanese Workers: Numbers of Years Employed" [Naichi-jin kinzoku nensu] appear on pages 169 – 170. Based on this information, Table 4 shows distribution of years employed among workers at Coalmine D.

In the case of Korean workers, 89.3 percent had been employed for less than two years, and only 10.7 percent had been employed for more than two years. In the case of Japanese workers, the corresponding figures were 42.8 percent and 57.2 percent, respectively.<sup>20</sup> As can be surmised from Table 4, Korean workers were highly concentrated in the wage range of below 50 yen, while Japanese workers were concentrated in the relatively high wage range of above 50 yen. However, this skewed wage distribution reflects differences in work efficiency resulting from differences in years of employment. Shigeru Nagasawa presented a survey conducted at the Iriyama Coal Company in the Joban coal district that estimates differences in work efficiency resulting from differences in the composition of work teams. According to this study, in the case of a team consisting of four Japanese and three Korean workers, the average measure of tunneling advance per worker was 0.8 shaku (about 24 cm). The corresponding figure for a team consisting of eight Korean workers with two years of experience was 0.51 shaku (about 15 cm: equivalent to 63.8 percent of the previous mixed Japanese-Korean team). Moreover, a team of eight Korean workers who had just completed three months of training achieved only 0.25 shaku (about 8 cm). (Shigeru Nagasawa 1987, p. 28 citing Collected Papers on the Forced Removal of Koreans [Chosen-jin kyosei renko ronbun shusei] 1993, p. 170) This data indicates that the number of years of employment, or

The survey covered the following 20 sites: 6 coalmines in Hokkaido, 3 metal mines in Honshu, 5 coalmines in Kyushu, 3 construction companies in Honshu, 2 factories in Honshu, and 1 factory in Kyushu. The survey addressed production management, labor management and worker welfare facilities. (Institute for Science of Labor [Rodo Kagaku Kenkyu-jo] (1943a), pp. 3-8)

There is also a significant difference between Korean and Japanese workers with less than one year of experience. The vast majority of Koreans had worked for less than one year. The standard term of labor contracts was two years, which applied to both "recruitment" and "government-mediated recruitment." Employers made various efforts to retain Korean workers at the end of their contract period. For example, mining companies defrayed the cost of several types of options, which included bringing family members from Korea, paying for a temporary visit to Korea, or paying a contract extension bonus. This was done because the experience and skills gained by a Korean coalminer during the two-year period of his contract were considered by the employers to constitute extremely valuable assets.

the accumulation of work experience, was the determining factor in work efficiency.<sup>21</sup>

The abovementioned *Survey Report* contains two more surveys that report on distributions by ethnicity and work experience, and the distribution of wages. Table 5 summarizes the information from Coalmine B, which was located in Hokkaido as in the case of Coalmine D.

In terms of years of employment, unlike in the case of Coalmine D, the Korean workers were concentrated in the 1–2 year range, while 42 percent of the Japanese workers were new hands with less than one year of experience. On the other hand, Korean workers with more than two years of experience accounted for 23.0 percent, while Japanese workers with more than two years of experience accounted for a much higher proportion, or 42.3 percent. These two differences balanced each other out so that, in comparison with Coalmine D, the distribution of wages among Korean and Japanese workers was very close to being identical. Thus, Korean and Japanese workers earning less than 50 yen accounted for 20.8 percent and 21.7 percent, respectively. The corresponding figures for Korean and Japanese workers earning more than 50 yen were 79.2 percent and 73.8 percent, respectively.

In the case of Metal Mine I, there were no Korean workers with more than two years of work experience, while 46.2 percent of the Japanese workers had been employed for more than two years. As a result, the distribution of wages shows that Korean and Japanese workers earning less than 50 yen accounted for 35.0 percent and 17.1 percent, respectively. Conversely, a substantially higher proportion of Japanese workers earned more than 50 yen than their Korean counterparts. It can be seen that the conclusions Pak Kyong-Sik reached regarding the presence of "ethnic discrimination" in wages is based on a one-sided interpretation of the data. As previously noted, wartime wages of Korean and Japanese workers were basically determined by the level of work efficiency. Judging logically, it is clear that wages were determined by work performance (coal output or metal ore output) and that work performance was directly and significantly affected by years of employment. This fact is borne out by data from Coalmine B and Metal Mine I on the distributions of work experience and wages. Looking at this important material collected, collated and later compiled by Pak Kyong-Sik himself, it seems that, instead of looking at the entire body of information available, Pak Kyong-Sik extracted certain portions of the information and arrived at hastily formulated conclusions.<sup>22</sup>

For more than 50 years, the assertions made by Pak Kyong-Sik were never critically examined. Consequently, these errors have survived to the present and have been repeated time and again. For example, Kim Moon-Young uncritically adopted Pak Kyong-Sik's wage distribution from Coalmine D in Hokkaido and added some fragmentary statements from witnesses to say that the wages paid to Korean workers were one-half of those paid to Japanese workers, or slightly exceeded one-half. (1995, pp. 138-141) Chon Gi-Ho used data from 18 mines operated by Nippon Mining Company (known for its gold mines) to argue that "ethnicity-based wage discrimination" existed. (2013, pp. 102-104) The salient points of his research are summarized in Table 7, consisting of the average wages of laborers working inside the mines and those working outside the mines as of March 1943.

According to Chon Gi-Ho, wages paid to Koreans working inside the mines were equivalent to

In the prewar period, wages paid for principal mining tasks such as excavating and tunneling were output-based. Chong Jin-Song (1989) points out that, when the details of the wage determination system are taken into consideration, it is difficult to identify the existence of ethnicity-based wage differentials even during the 1920s.

Survey Report on the Working Conditions of Workers from the Korean Peninsula [Hanto romusha kinro jokyo ni kansuru chosa hokoku] is reproduced in Pak Kyong-Sik (1981) Chosen mondai shiryo sosho, dai ni maki: senji kyosei renko – romu kanri seisaku II [Collected materials on Korean issues, Vol. 2: wartime forced removal, labor management policies II].

"75–85 percent of the wages paid to Japanese workers." Having re-tabulated and re-calculated the data used by Chon Gi-Ho, the present writer found that Korean wages were actually equivalent to 86.8 percent of Japanese wages. It is questionable whether this level of disparity can be fairly labeled to constitute ethnic discrimination. Moreover, very substantial variations are seen among mines. Thus, the ratio of Korean to Japanese wages ranges from a low of 73.6 percent to a high of 112.2 percent. Instances of high Korean wages are found at the Bajo and Onoyama gold mines. As for workers employed outside the mines, Korean wages amounted to 94.1 percent of Japanese wages. Notably, Korean wages exceeded Japanese wages at seven mines, including the Hokuryu Mine. A comparison of mines indicates that the range of wage differentials was larger among those working outside the mines than among those working inside the mines. Thus, in the case of workers employed outside the mines, the ratio of Korean to Japanese wages ranges from a low of 67.8 percent to a high of 129.7 percent.

As has been noted, among workers employed outside the mines, Korean wages exceeded Japanese wages in certain instances. Chon Gi-Ho has attempted to explain this phenomenon in the following manner. "The number of Japanese male workers employed outside the mines decreased, and the number of Japanese female workers and temporary workers employed outside the mines increased, resulting in an overall decline in Japanese wages. As a result, wages for Korean workers employed outside the mines became relatively higher." This is a plausible explanation. However, as previously stated, the nominal wages of both Korean and Japanese workers continued to climb throughout the war years, and there are cases where Koreans working inside the mines were being paid more than their Japanese counterparts. In other words, there is a possibility that wages for Koreans working inside the mines for the Nippon Mining Company were higher than those of their Japanese counterparts because Korean wages rose faster than Japanese wages, and not because the wages of Japanese workers employed outside mines declined. If this explanation is correct, it can then be argued that the figures in Table 7 do not really suggest a significant disparity in wages based on ethnicity, but rather that they reflect the relatively small difference in labor efficiency that existed between Korean and Japanese workers. This is a highly significant conclusion that leads to another question. Did the composition of Japanese mining teams change in a manner that lowered the productivity of Japanese workers, or did Korean wages rise relatively faster than that of Japanese workers? An effort must be made to determine which of these two possibilities more accurately reflects the course of events. To answer this question, it is necessary to examine data on changes in the wages of specific workers, such as may be found in "payroll ledgers." While this information does exist, unfortunately it has not been made public.

The assertion that ethnicity-based wage discrimination did not exist in wartime Japan in a systematic and organized fashion, at least on an institutional level as indicated in the rules of employment of individual mines, is not necessarily new. The problem is that this position has been ignored in Korean academic circles. Shigeru Nagasawa has written concerning the Joban Mine that the wages of Korean workers were based on a subcontracting system where wages were calculated according to output, and that this arrangement applied to Japanese workers as well. Furthermore, Nagasawa explains that the calculation of individual wages was based on the following three factors: total output of the relevant work area, the proportional rate assigned to each individual worker (11 points for a highly skilled veteran front-line coalminer known as an *osakiyama*; 10 points for a only slightly less skilled front-line miner known as a *sakiyama*; 9.0 – 9.5 points for a back-end miner known as an *atoyama*; 7.5 – 8 points for a new hand), and the number of days worked. (Nagasawa 1977, p. 101 citing *Collected Papers on the Forced Removal of Koreans* 1993, p. 130) Nagasawa affirms the existence of the same arrangement in a paper published in 1987. Specifically, he notes that the wages of coalminers working in the Joban Mine were based on a contracted unit value and production tonnage, and that, as in the case of Japanese workers,

wages were calculated according to collective output. He adds that a fixed daily wage applied to other tasks, and that wages differed by type of work performed but not by ethnicity. Nagasawa concludes that a reading of "Terms of Wages" alone does not point to ethnic discrimination, and asserts that the same can be said about other companies as well. (Nagasawa 1987, citing *Collected Papers on the Forced Removal of Koreans* 1993, pp. 168-169)

Hiroshi Ichihara has argued that wages were determined based on productivity and type of job performed, and asserts that wage-related disputes occurred because it was difficult to properly explain this arrangement to Korean workers. Ichihara concludes that this should not be taken as evidence of ethnic discrimination, and interprets this to have been a problem that originated in the shortcomings of worker relocation organizations in Korea. (Ichihara, 1997, p. 25) The problem was that worker relocation organizations failed to properly inform Korean workers of why wages differed among individuals. Ichihara points out that the Government-General of Korea was not responsible for this misunderstanding and that the problem should be attributed to the personnel departments of Japanese coal and metal mines that were recruiting workers in Korea.

Kazumasa Aizawa is notable for his research on metal mines. When explaining the wage system of the Mukuromi Gold Mine in Iwate Prefecture, Aizawa states that wages for Korean workers were based on a grading system, which was also applied to calculating wages for Japanese workers. Aizawa explains that equal pay was paid for equal work because the purpose of recruiting Koreans was not to boost profits through payment of low wages, but to supplement the workforce and overcome labor shortages. (1988, p. 242) Although pursuing higher profit rates and supplementing the workforce are not mutually exclusive, Aizawa should be credited for correctly recognizing that the primary purpose of Korean recruitment was to supplement the workforce and overcome the general shortage of labor. On the other hand, Nishinarita concluded that, although Korean wages were slightly lower than those of their Japanese counterparts, this essentially reflected differences in skill levels and did not mean that the wage system discriminated based on ethnicity. However, Nishinarita states that the amounts received by Korean workers were actually very small due to forced savings, and that this is proof of exploitation. (1997, pp. 274-277)<sup>23</sup>

Hiroshi Ichihara's research on coalminers in Hokkaido reveals that in 1940, Korean workers at the Sumitomo Utashinai Mine were earning 30 percent less than Japanese workers. However, he explains that the disparity was due to the lower efficiency of Korean workers resulting from the language barrier and lower skill levels. (1991, p. 103) According to *Hokkaido and Korean Workers* [*Hokkaido to Chosen-jin rodosha*] compiled by the Editorial Committee of the Survey Report on the Forced Removal of Koreans, work at the coalmines operated by the Hokkaido Colliery & Steamship Company was conducted on a contract basis and, in accordance with the company's internal regulations, there was no discrimination in wages between Korean and Japanese workers. That is, he writes that "wage differentials" resulted from differences in experience (years of employment) or, in other words, differences in work efficiency. (1999, pp. 248-251) Among more recent researchers, Brandon Palmer concludes that Korean workers were subject to the

Survey Report on the Working Conditions of Workers from the Korean Peninsula [Hanto romusha kinro jokyo ni kansuru chosa hokoku] is reproduced in Pak Kyong-Sik (1981) Chosen mondai shiryo sosho, dai ni maki: senji kyosei renko – romu kanri seisaku II [Collected materials on Korean issues, Vol. 2: wartime forced removal, labor management policies II].

same wage system as Japanese workers. (2014, p. 300)<sup>24</sup> In this connection, the following witness accounts are noteworthy. Accounts from Kyushu coalmines recount that workers were told, "Work more and earn more; work less and earn less." (Editorial Committee of the Survey Report on the Forced Removal of Koreans 2006b, p. 177) In the case of Hokkaido, this became, "Load more and wage will increase; load less and wage will decrease." (Editorial Committee of the Survey Report on the Forced Removal of Koreans 2006b, p. 153)

#### V. Trends in Wage Differentials

What trends can be identified in wartime wage differentials between Korean and Japanese workers? Did prewar wage differentials increase or decrease in wartime? While it is not easy to answer these questions, the purpose of this section is to sketch a rough outline based on published materials. Table 8 presents data from the Meiji Mining Company's Akaike Coalmine located in Fukuoka Prefecture. The data covers the period between July 1944 and October 1945, and records the average daily wages of coalminers and installers (workers in charge of installing structures to prevent collapse in mineshafts and other work areas) by ethnicity. Most of the Korean workers employed in wartime coalmines worked inside the mines and, among these, the largest number worked as excavators. (Lee Woo Youn, 2015) As important as the information in Table 8 is, as the only source covering this period, and notwithstanding the fact that it was published in 1991, this data has never been used by researchers. As previously noted, a complex array of charges was withheld from wages, including forced savings and food costs. This has given rise to the generally accepted theory that a mere pittance was paid in wages after the deduction of these considerable sums, and that very serious ethnic discrimination existed in wages. It is likely that these assumptions have clouded the vision of researchers and prevented them from using this available material.

The following can be surmised concerning wage differentials between Korean and Japanese workers during a 14-month period leading to the end of the war. First, with regard to excavators, the wage differential ranged between 0.8 and 5.0 percent. With regard to installers, after excluding an exceptionally high differential registered in March 1945, the wage differential ranged between 1.4 and 5.0 percent. This differential is far too small to be identified as evidence of ethnic discrimination, and should be interpreted to reflect differences in work efficiency. It is also notable that Korean wages exceeded Japanese wages during certain periods. For excavators, this occurred during May and June 1945, and in November 1944 for installers. For the whole of 1944, wages for Korean excavators were 2.9 percent lower than their Japanese counterparts. However, in 1945, this relation was reversed to give a slight advantage to Korean excavators.<sup>25</sup> During 1944, wages for Korean installers were 2.1 percent lower than their Japanese counterparts. The differential increased to 4.2 percent in 1945. As of September 1943, of the total number of Korean workers working inside coalmines, 54.2 percent were employed as excavators and 8.9 percent as installers. (Sekitan Tosei-kai Romu-bu 1943, p. 317) Taking these figures into consideration, it is possible to theorize that ethnicity-based wage differentials in the Akaike Coalmine were lower in 1945 than in 1944.

Forced savings also applied to Japanese workers. This is because this system was adopted as a policy measure to counter wartime inflation. During the war years, Korean workers were able to normally withdraw their savings at the end of their term of employment. However, immediately after the end of the war, some workers hurriedly returned home before being able to settle accounts and withdraw their savings. This matter will be addressed in detail in a future paper.

Although Table 8 indicates "0.0," the actual figure is 0.03 percent. That is, in 1945, wages for Korean workers were 0.03 percent higher than those for Japanese workers.

In the following paragraphs, an attempt is made to sketch a rough outline of trends in ethnicity-based wage differentials using the fragmentary data that is available. First, a series of other available sources shall be introduced. According to data covering 1942 from the Hitachi Coalmine in Ibaraki Prefecture, monthly average wages for Korean and Japanese workers were 52.96 yen and 59.46 yen, respectively, indicating that Japanese workers were paid more. However, the average number of workdays per month came to 21.9 days and 24.9 days, respectively, indicating that the Japanese workers worked three more days than their Korean counterparts. This data can be used to calculate the average daily wage for the two groups, which indicates that Korean workers earned 2.42 yen and Japanese workers earned 2.39 yen. That is, this calculation shows that Korean workers were earning slightly more per working day than their Japanese counterparts. (Rodo Jijo Chosasho, 1942, p. 90) At this point, it cannot be determined whether this differential reflects differences in labor efficiency or some other factor. However, among some Japanese labor managers, there was an understanding that this situation resulted from the "special economic treatment" accorded to Korean workers. 26 For this reason, there was considerable dissatisfaction among some Japanese that they were being treated the "same as Koreans who had just completed their training period." (Masaru Tonomura 2012, p. 67)<sup>27</sup> In a survey of an unnamed coalmine located in Hokkaido, the Institute for Science of Labor found that Korean wages were higher in all of the categories of excavators, installers and mechanics working inside the mine, and that Japanese wages were higher for transporters, operators and miscellaneous tasks. (1943c, Pak Kyong-Sik ed., 1981, Vol. I, p. 19) Commenting on these examples, E.W. Wagner has written, "Koreans were paid the standard wage scale for Japanese workers." (1951, p. 46) $^{28}$  R. Mitchell points out that in certain instances, Korean workers "were not being treated worse than Japanese conscripts, and that in some cases they were being treated better." (1967, p. 85)

The following material from the Joban Coalmine in Fukushima Prefecture also seems to have never been used before. In December 1944, the company adopted a plan to raise wages in the following year and estimated the increase in costs. The average daily labor cost used in these calculations is presented in Table 9. First, it is noted that the wage differential is larger than that at the Akaike Coalmine. Once again, it can be assumed that the reason for the disparity lies in the difference in the distribution of the number of years employed. Unfortunately, no data can be found in this material to prove this inference. As a proxy for years of employment, Table 10 summarizes the age structure of the miners working at the Joban Coalmine.

There is a significant difference in age distribution data available for the Iwaki Coalmine and the Joban Coalmine. First, the data from the Iwaki Coalmine includes both Korean as well as Japanese workers, who were in the majority, and presents the distribution for the entire workforce. Second, it should be noted that a comparison of the age distributions of Korean and

The following excerpt is from a document of Sumitomo Mining Company. "Workers from the Korean Peninsula undergo three months of training upon recruitment. The Government-General of Korea shows a particularly strong interest in the treatment of workers and their training and education during this period. This interest goes to the extent of becoming meddlesome. Regarding wages, the Government-General of Korea demands certain assurances. From the perspective of the labor managers of this mine, these matters constitute special treatment (preferential treatment that generally exceeds what is economically rational) accorded solely to workers from the Korean Peninsula. Therefore, such workers must be treated separately from the other workers." (Sumitomo Konomai Mining Company 1941, cited in Yoshihiko Moriya ed. 1991, III *The Koreans* [*Chosen-jin*] Vol. 2, p. 1,483)

Tonomura cites the November 1940 issue of *Tokudaka Monthly* [*Tokudaka geppo*] as his source.

<sup>&</sup>lt;sup>28</sup> U.S. Strategic Bombing Survey: Coals and Metals in Japan's War Economy

Japanese workers indicates that the age of Korean workers does not correspond to their years of employment, and merely indicates the age at which they were mobilized and relocated to Japan. Korean workers were employed under two-year contracts, very few extended their contract at the end of two years and a very large number of Korean workers escaped before the end of their two year contracts. In contrast, Japanese coalminers mostly consisted of "on-site conscripts (*genin choyo*)" who were originally hired by the employer but later assigned as national conscripted workers in the same workplace. Therefore, the age distribution of Japanese workers more closely corresponds to their years of employment. Table 10 shows that 62.1 percent of the Korean workers at the Joban Coalmine were in their twenties. Compared to this high level of concentration, the data from the Iwaki Coalmine depicts a far more even age distribution. In other words, the Koreans working at the Joban Coalmine were less experienced and less skilled than their Japanese counterparts because far fewer of them had several years of actual experience in the mines. For this reason, the disparity in wages between Korean and Japanese workers shown in Table 9 can be interpreted to reflect the relatively lower productivity of Korean workers.

Table 9 also shows that the wage differential decreased between 1944 and 1945. Moriya has reached the following conclusion using data from Sumitomo's Konomai Mine in Hokkaido. "On the grounds that Korean workers were less productive, wage increases were implemented six months to one year later than for Japanese workers. However, in the latter stage of government-mediated recruitment, this discriminatory treatment was gradually removed, beginning with the most skilled workers. Moreover, in the conscription stage, all discrimination was basically eliminated." (2009, Vol. 3, pp. 37-38)<sup>29</sup> While the implication is that ethnic discrimination gradually decreased during wartime, it is not possible to generalize this conclusion based on currently available information. Efforts must be made to discover new materials, and at the same time to carefully examine any data that is found.

Another important challenge is to identify the characteristics of wartime wage differentials between Korean and Japanese workers by comparing prewar wage disparities with wartime disparities. Unfortunately, however, it is impossible to undertake such comparisons based on the information available at this time. The primary reason is the general paucity of wage data from both the prewar and wartime periods. As previously noted, data available from the Nippon Mining Company only covers March 1943, while data from the Meiji Mining Company's Akaike Coalmine is the only time-series data that covers a period of more than one year. Prewar data on wage differentials by ethnicity at coal and metal mines in Japan is also extremely scarce. In light of the scarcity of information, it is the hope of the present writer that the following observations on trends in wage differentials may provide future researchers with valuable hints to be pursued.

First, Pak Kyong-Sik has written that, in 1921, the wages of Korean coalminers were equal to 60 percent of the wages of Japanese coalminers. (1956, p. 35; 2008, Hangul edition, p. 39) If this is correct, it would mean that wage differentials decreased substantially during the war years. However, because Pak Kyong-Sik inexplicably fails to cite any sources for his calculation, this line of inquiry cannot be pursued further. Second, the following can be found in materials prepared by the Osaka Municipal Government's Department of Social Affairs, Survey Section. Wages for coalminers are presented by ethnicity in a list that divides wages into the three categories of "highest, standard and lowest" as of June 1923. Wages for Korean workers are lower than those of Japanese workers by 23.3 percent in the highest category, 16.0 percent in the standard category and 11.1 percent in the lowest category. This level of disparity is significantly larger than what was

In exceptional cases, the standard work unit differed among companies. However, normally one work unit was equivalent to nine hours of work inside the mines or ten hours outside the mines. "Government-mediated recruitment" began in February 1942, and "conscription" began in September 1944. The source used by Shigeru Moriya is the Sumitomo Konomai Mine's Notice on Change in Wage by Job Description and Worker Number [Romu-in shokumei bango kettei chingin henko tsuchi sho].

observed at the Akaike Coalmine during the war years. However, compared with data for wage differentials during the war period from the Joban Coalmine of the Nippon Mining Company, the level of disparity is roughly the same. This makes it difficult to discuss whether disparities were growing or narrowing.

The third relevant source is entitled *Work Conditions of Korean Workers in the District [Kannai Chosen-jin rodo jijo*] and was compiled by the Fukuoka District Employment Agency (1929). Already cited in the research of Chong Jin-Song, this source states that "in 1928, wages for Korean coalminers were 20–30 percent lower than Japanese coalminers." (Chong Jin-Song1989, p. 208)

As the previously mentioned Akaike Coalmine was also located in Fukuoka Prefecture, a reduction in the wage differential between Korean and Japanese workers during the war years can be ascertained by comparing data from the two mines. The fourth source again comes from Osaka and contains October 1930 wage data for manufacturing and construction jobs, which belong to job categories very similar to mining. This data affirms a sizeable disparity, with wages for Korean construction workers and manufacturing workers amounting to only 67.1 percent and 70.2 percent, respectively, of wages for corresponding Japanese workers. A comparison of these figures with wartime coalmining wages points to a narrowing of ethnicitybased wage differentials. It should be noted, however, that manufacturing wages represent wages for craftsmen (skilled workers), so that direct comparison with coalmining wages would not be appropriate. Due caution must be exercised in undertaking such comparisons. The fifth and final source of information is entitled Conditions of Korean Workers [Chosen-jin rodosha ni kansuru jokyo] (1924), which was compiled by the Ministry of Home Affairs' Department of Social Affairs, Section 1. This is the only comprehensive survey that covers the Japanese homeland in its entirety. The publication contains information on coalmine and mining wages for July 1924. The information on mining wages is excerpted and reproduced in Table 11.

The job categories in Table 11 consist of "extraction and metallurgy," "extraction," and "mining," suggesting that the nationwide survey was not conducted using a common set of criteria. Fukushima and Ibaraki Prefectures neighbor each other and sit astride the Joban coalfield, one of Japan's three largest coalfields. Unlike Ibaraki Prefecture, there is hardly any evidence of ethnicity-based wage disparity in Fukushima. Data for Hokkaido also points to either no disparity or higher wages for Korean workers. While it is difficult to explain this result, what can be deduced from this table is that wages for Korean and Japanese workers differed significantly among individual coal and metal mines. This means that any effort to observe the trends in ethnic wage disparities between the 1920s and 1945 will ultimately have to await the publication of wage-related data from individual companies, 30 analysis of which will allow us to verify whether prewar wage differentials decreased during the war years. However, two additional points must be taken into consideration. As mentioned before, the first point to bear in mind is the impact of changes in the composition of Japanese workers on wage differentials with their Korean counterparts. Second, if a trend is actually identified for this relatively short period of time, it will be important to determine the implication of such a trend. With these points in mind, it can be said that research on wartime ethnic wage disparity and trends in this disparity has just started.

According to Naoki Tanaka, the payroll ledgers [chingin daicho] of the Nitchitsu Emukae Mining Company were archived at Kyushu University's Research Institute on Industrial Labor. (1978, p. 609) Payroll ledgers consisted of separate sheets entered and kept for each individual worker, and covers both Korean and Japanese workers. Each sheet contains detailed monthly records of work performed, wages paid and various allowances paid. It is presumed that this material is currently held at Kyushu University's archives. It is believed that large volumes of this type of information exist. However, these have yet to be published.

As Japan mobilized its resources for total war, the most important objective was to increase output. To achieve this purpose, workers had to be incentivized. Employers on the other hand, were flush with cash that came from the wartime increase in money supply and government support for war industries. Putting these two factors together, it can be inferred that there was no monetary rationale for employers to pay discriminatory wages to Korean workers for reasons unrelated to labor productivity. In fact, discriminatory wages would have had a negative impact on the immediate objectives of managing Japan's wartime systems.

#### VI. Conclusion

Using materials published by researchers who have taken the position of "forced removal of workers and forced labor," we have observed that wartime wages paid to Korean coal and metal mine workers in Japan were high enough to allow a degree of choice in allocating earnings between remittances to family in Korea and local expenditure. We were able to confirm that the assertion made in prior research that "wages were either never paid, or amounted to a mere pittance" is not supported by the available empirical data. Furthermore, we found that the wages of Korean coal and metal mine workers were not significantly different from the wages paid to Japanese workers. Thus, we have shown in this paper that the assertion of "ethnicity-based wage discrimination" found in prior research cannot be proven to be correct. In addition, various research and empirical data exist suggesting that the wage differential between Korean and Japanese workers actually decreased during the war years. Progress in research on this topic must await the publication of new materials from individual companies.

It has been the contention of prior research that a very large part of receivable wages was withheld through a system of forced savings. If this contention is accurate, it inevitably leads to the question of whether such savings were equitably paid back to Korean workers. Similarly, it must be determined whether remittances made to family members were properly delivered to the intended recipients. Although these are questions that cannot be avoided and must be answered in considering the wages paid to Korean workers, the fact is that they have never been subjected to rigorous and thorough research. This indeed is the area that the present writer hopes to examine in future research. Parallel to a re-examination of remittances and forced savings, the features and characteristics of "forced removal" of workers must be identified. Moreover, acts of Korean resistance, including escape and disputes with employers, must be studied, and a better understanding of the everyday life of Korean workers must be attempted by assessing the purchase of a wide range of consumer goods and examining such behavior as drinking, gambling, use of holidays, and excursions. Such research will allow us to more accurately re-create the everyday life of Korean coal and metal miners who were mobilized to work in wartime Japan. These are the challenges that the present writer looks forward to addressing in future research.

Table 1: Wages and Expenditures at Major Mines in 1940

(Units: yen, %)

Location	Name	Туре	Average monthly wage	Average monthly savings	Average monthly remittance	Cost of food	Difference
Sapporo	Utashinai Coalmine	Coal	84.29	6.75	41.50	18.6*	17.44
District	Sorachi Coalmine	Coal	78.33	15.10	25.78	13.95	23.50
	Yubetsu Coalmine	Coal	71.39	18.82	24.92	17.05	10.60
	Harutori Coalmine	Coal	99.06	10.00	20.00	18.6*	50.46
	Yubari Coalmine	Coal	68.89	8.18	26.10	14.57	20.04
	Mitsui Sunagawa Coalmine	Coal	80.37	20.16	23.49	13.95	22.77
	Toyoha Mine	Metal	85.00	35.00	45.00	18.6*	-13.60
	Shizukari Mine	Metal	80.04	20.17	24.93	16.28	18.67
	Konomai Mine	Metal	85.46	36.78	31.94	17.05	-0.31
Sendai	Takadama Mine	Metal	51.34	13.55	16.78	12.40	8.61
District	Hosokura Mine	Metal	58.42	2.50	16.00	15.50	24.42
	Funauchi Mine	Metal	70.00	6.00	50.00	18.6*	-4.60
Tokyo	Sado Mine	Metal	66.77	11.44	21.16	12.40	21.77
District	Kawazu Mine	Metal	58.98	16.56	23.51	10.85	8.06
Osaka	Tsuchikura Mine	Metal	80.00	10.00	30.00	18.60	21.40
District	Okuki Mine	Metal	70.00	5.00	20.00	18.6*	26.40
	Shirataki Mine	Metal	67.57	23.04	19.47	10.85	14.21
	Kishu Mine	Metal	67.09	4.20	6.10	15.50	41.29
	Ooya Mine	Metal	85.50	7.50	17.00	18.6*	42.40
	Wanibuchi Mine	Metal	64.10	3.70	40.00	13.95	6.45
	Imade Mine	Metal	65.00	3.00	25.00	13.95	23.05
	Besshi Mine	Metal	62.11	19.40	29.00	9.30	4.41
Fukuoka District	Sanyo Anthracite Mine	Coal	79.64	38.13	57.28	12.40	-28.17
	Iizuka Coalmine	Coal	76.10	10.39	21.13	16.43	28.15
	Shinnyu Coalmine	Coal	74.67	15.00	25.00	14.88	19.79
	Hojo Coalmine	Coal	76.48	11.00	35.00	14.88	15.60
	Namazuta Coalmine	Coal	80.35	20.00	20.00	14.88	25.47
	Kamiyamada Coalmine	Coal	74.10	16.00	35.00	14.88	8.22
	Sakito Coalmine	Coal	77.10	8.00	32.33	18.6*	18.17

Location	Name	Туре	Average monthly wage	Average monthly savings	Average monthly remittance	Cost of food	Difference
Fukuoka	Aso Company	Coal	72.00	22.50	22.50	15.50	11.50
District	Yoshikuma Coalmine	Coal	50.61	6.73	27.50	15.50	0.88
	Mineji – Himine Coalmine	Coal	64.48	15.38	22.24	13.95	12.91
	Shakanoo Coalmine	Coal	72.96	17.10	20.80	13.18	21.89
	Shimoyamada Coalmine	Coal	70.22	12.50	10.88	13.95	32.89
	Hirayama Coalmine	Coal	73.87	11.07	25.00	15.50	22.30
	Toyokuni Coalmine	Coal	65.61	10.00	20.00	15.50	20.11
	Yamano Coalmine	Coal	40.00	6.23	21.30	17.05	-4.57
	Inohana Coalmine	Coal	90.00	16.22	13.51	15.50	44.77
	Nakatsuru No. 1 Mine	Coal	64.22	6.00	6.50	13.95	37.77
	Onoura Coalmine	Coal	66.30	5.50	7.50	13.95	39.35
	Iwaya Coalmine	Coal	72.88	11.92	23.29	18.6*	19.07
	Yoshinoura Coalmine	Coal	67.00	16.20	30.35	15.50	4.95
	Senryu Coalmine	Coal	63.86	13.41	27.24	15.50	7.71
	Ikeno Coalmine	Coal	76.64	6.01	14.96	15.50	40.17
	Kanda Coalmine	Coal	85.47	10.29	28.75	15.50	30.93
	Saganoseki Mine	Metal	75.64	12.73	16.72	12.40	33.79
	Average Ratio (%)		71.95 (100.0)	13.37 (18.6)	24.84 (34.5)	15.24 (21.2)	18.50 (25.7)

Source: Japan Mining Association [Nihon Kozan Kyokai] (1940), pp. 4-300, as excerpted in Pak Kyong-Sik (1981) *Chosen mondai shiryo sosho, dai ni kan: senji kyosei renko – romu kanri seisaku II* [Collected materials on Korean issues, Vol. 2: wartime forced removal, labor management policies II].

Table 2: Breakdown of Wages and Expenditures

(Units: yen, %)

Year	Amounts with	held			Remitted	Balance	Total
	Food	Savings	Other	Sub-total			
1940	15.24 (21.2)	13.37 (18.6)	11.78 (16.4)	40.39 (56.1)	24.84 (34.5)	6.72 (9.3)	71.95 (100.00)
1941		11.50 (Cannot be computed)			21.52 (Cannot be computed)		52.96 (Cannot be computed)
1944	18.00 (12.0)	45.00 (30.0)	25.00 (16.7)	88.00 (58.7)	40.00 (26.7)	22.00 (14.7)	150 (100.00)
1945				67.16 (53.8)	36.88 (29.6)	20.75 (16.6)	124.79 (100.00)

Sources: Data for 1940 is from Japan Mining Association (1940), pp. 1-300. Data for 1941 is from Rodo Jijo Chosa Jo (1941), p. 90. This source provides no data on monthly average income, savings and remittance for 1941. Data for 1944 is from Sekitan Tosei Kai Kyushu Chibu (1945), p. 209, and data for 1945 is from Yoshihiko Moriya (1996), p. 128.

Table 3: Wage Distribution by Ethnicity at Coalmine D in Hokkaido

(Units: number of individuals, %)

	Less than 30 yen	30-50 yen	50-70 yen	70-90 yen	90-110 yen	110-130 yen	Total
Japanese	32	123	187	194	181	160	877
	(3.6)	(14.0)	(21.3)	(22.1)	(20.6)	(18.2)	(100.0)
Korean	117	126	40	22	7	12	324
	(36.1)	(38.9)	(12.3)	(6.8)	(2.2)	(3.7)	(100.0)

Source: Institute for Science of Labor [Rodo Kagaku Kenkyu-jo] (1943a), p. 90.

Table 4: Distribution of Years Employed by Ethnicity at Coalmine D in Hokkaido

(Units: number of persons, %)

	Less than 1 year	1-2 years	2-3 years	3-4 years	4-5 years	5 years or more	Total
Korean	273	53	39	-	-	-	365
	(74.8)	(14.5)	(10.7)	-	-	-	(100.0)
Japanese	276	123	106	101	42	285	933
	(29.6)	(13.2)	(11.4)	(10.8)	(4.5)	(30.5)	(100.0)

Source: See text

### Table 5: Years Employed and Wages at Coalmine B

(Units: number of persons, %)

A: Years employed

	Less than 1 year	1-2 years	2-3 years	3-4 years	4-5 years	5 years or more	Total
Korean	194	524	215				933
	(20.8)	(56.2)	(23.0)				(100.0)
Japanese	2,263	861	523	448	305	1,017	5,417
	41.8	15.9	9.7	8.3	5.6	18.8	100.0

#### B: Wages

	Less than 30 yen	30-50 yen	50-70 yen	70-90 yen	90-110 yen	110 yen or more	Total
Korean	130	68	98	134	147	375	952
	(13.7)	(7.1)	(10.3)	(14.1)	(15.4)	(39.4)	(100.0)
Japanese	443	655	611	753	1,179	1,435	5,076
	(8.7)	(12.9)	(12.0)	(14.8)	(23.2)	(28.3)	(100.0)

Source: Institute for Science of Labor [Rodo Kagaku Kenkyu-jo] (1943a), pp. 169-170 for years employed, and pp. 80-81 for wages.

## Table 6: Years Employed and Wages at Metal Mine I

(Units: number of persons, %)

A: Years employed

	Less than 1 year	1-2 years	2-3 years	3-4 years	4-5 years	5 years or more	Total
Korean	96	188					284
	(33.8)	(66.2)					(100.0)
Japanese	654	450	324	298	257	70	2,053
	(31.9)	(21.9)	(15.8)	(14.5)	(12.5)	(3.4)	(100.0)

#### B: Wages

	Less than 30 yen	30-50 yen	50-70 yen	70-90 yen	90-110 yen	110-130 yen	Total
Korean	38	53	69	47	34	19	260
	(14.6)	(20.4)	(26.5)	(18.1)	(13.1)	(7.3)	(100.0)
Japanese	73	222	469	403	299	256	1,722
	(4.2)	(12.9)	(27.2)	(23.4)	(17.4)	(14.9)	(100.0)

Source: Institute for Science of Labor [Rodo Kagaku Kenkyu-jo] (1943a), p. 54 and pp. 169-170 for years employed, and pp. 173-174 for wages.

Table 7: Wages at Nippon Mining Company

(Units: wages in yen, differential in %)

Name of	In-mine work	ters		Outside workers				
Mine	Korean	Japanese	Wage differential	Korean	Japanese	Wage differential		
Hokuryu	3.435	4.038	14.9	2.912	2.771	-5.1		
Toyoha	4.207	5.586	24.7	3.171	3.055	-3.8		
Eniwa	3.534	4.327	18.3	2.826	3.364	16.0		
Ogane	3.806	5.091	25.2	2.712	3.251	16.6		
Kamikita	3.631	4.273	15.2	2.695	2.868	6.0		
Akaishi	3.395	3.493	2.8	-	2.572	-		
Hanawa	3.127	4.149	24.6	2.378	2.475	3.9		
Otani	3.050	3.232	5.6	2.551	2.079	-22.7		
Takadama	2.342	3.091	24.2	1.524	1.958	22.2		
Hitachi	3.112	4.226	26.4	2.823	2.688	-5.02		
Nikko	2.321	2.797	17.0	2.293	2.169	-5.7		
Mikawa	3.031	3.801	20.3	1.561	2.221	29.7		
Minegasawa	2.804	2.843	1.4	2.283	2.250	-1.5		
Ogoya	3.394	4.110	17.4	2.405	2.446	1.6		
Shirataki	3.614	4.073	11.3	2.291	2.171	-5.5		
Bajo	3.660	3.262	-12.2	1.322	1.900	30.4		
Onoyama	3.170	2.998	-5.7	2.893	2.230	-29.7		
Kasuga	2.696	2.880	6.4	2.512	2.986	15.9		

Source: Chon Gi-Ho (2003), p. 103, based on data contained in Nippon Mining Company, *Showa 17 nen shimohanki jigyo gaikyo* [Summary of operations during second half of Showa 17 (1942)].

Note: Wage differential in Tables 7 and 8 are computed as follows: (Japanese wages – Korean wages) x 100 / Japanese wages.

Table 8: Average Daily Wages at Meiji Mining Company's Akaike Coalmine

(Units: wages in yen, differential in %)

Year	Month	Excavators			Installers		
		Korean	Japanese	Wage differential	Korean	Japanese	Wage differential
1944	June	4.17	4.29	2.8	3.82	3.94	3.0
	July	4.28	4.51	5.1	3.83	3.96	3.3
	Aug	4.28	4.39	2.5	3.82	3.92	2.6
	Sep	4.21	4.32	2.5	3.88	3.97	2.3
	Oct	4.32	4.42	2.3	3.84	3.98	3.5
	Nov	4.41	4.58	3.7	3.95	3.93	-0.5
	Dec	4.49	4.56	1.5	4.01	4.04	0.7
	Average	4.31	4.44	2.9	3.88	3.96	2.1
1945	Jan	4.61	4.68	1.5	4.08	4.20	2.9
	Feb	4.72	4.89	3.5	4.01	4.19	4.3
	Mar	4.77	4.96	3.8	4.00	4.43	9.7
	Apr	4.56	4.32	-5.6	4.96	5.21	4.8
	May	4.62	4.39	-5.2	4.93	5.19	5.0
	June	5.15	5.14	-0.2	5.04	5.11	1.4
	July	5.29	5.33	0.8	5.20	5.29	1.7
	Average	4.82	4.82	0.0	4.60	4.80	4.2

Source: Meiji kogyosho romu geppo [Meiji Mining Company monthly labor report], various issues, as cited in Eidai Hayashi (1991), pp. 1153-1220.

Table 9: Daily Wages at Joban Coalmine

(Units: wages in yen, differential in %)

Category	In-mine male workers			Outside male workers			
	Korean	Japanese	Wage differential	Korean	Japanese	Wage differential	
Old average daily wage	4.127	4.998	17.4	2.797	3.805	26.5	
New average daily wage	4.947	5.743	13.9	3.594	4.400	18.3	

Source: Joban Coalmining Company (1944), p. 382.

Table 10: Age Distribution of Coalminers

(Units: number of persons, %)

Age	Korean workers (Joban Coalmine)	Ratio	Total all workers (Iwaki Coalmine)	Ratio
15-20	435	9.2	752	13.6
21-25	1,587	33.4	894	16.2
26-30	1,365	28.7	905	16.4
31-35	614	12.9	856	15.5
36-40	475	10.0	797	14.3
41-45	197	4.1	637	11.6
46-50	66	1.4		12.2
51-55	11	0.2	671	
56 and over	4	0.1		
Total	4,754	100.0	5,212	100.0

Source: Shigeru Nagasawa (1987), p. 175.

Note: Data as of October 31, 1944 for Joban Coalmine and October 31, 1943 for Iwaki Coalmine

**Table 11: Mining Related Wages** 

(Units: wages in yen, differential in %)

Prefecture and Job	Ethnicity	Highest	Normal	Lowest
Fukuoka: Extraction and Metallurgy	Japanese	3.40	2.00	0.90
	Korean	2.90	1.50	0.80
	Wage differential	14.7	25.0	11.1
Saga: Extraction	Japanese	2.00	1.80	1.50
	Korean	1.80	1.70	1.50
	Wage differential	10.0	5.6	0.0
Yamaguchi: Extraction	Japanese	3.60	2.00	1.50
	Korean	3.50	1.90	1.50
	Wage differential	2.8	5.0	0.0
Fukushima: Extraction and Metallurgy	Japanese	2.50	1.50	1.00
	Korean	2.50	1.50	1.00
	Wage differential	0.0	0.0	0.0
Ibaraki: Mining	Japanese	2.80	2.00	1.20
	Korean	2.50	1.67	0.70
	Wage differential	10.7	16.5	41.7
Hokkaido: Extraction and Metallurgy	Japanese	3.97	2.50	1.60
	Korean	3.00	2.50	1.80
	Wage differential	24.4	0.0	-12.5

Source: Compiled from Ministry of Home Affairs, Department of Social Affairs, Section 1, *Chosen-jin rodosha ni kansuru jokyo* [Conditions of Korean workers], pp. 489-529.

#### References

Ministry of Welfare (1941), *Inyu romusha kunren oyobi toriatsukai yoko* [Guidelines on training and treatment of incoming workers]. In Shigeru Nagasawa ed. (1992), II *Senji-ka chosen-jin chugoku-jin rengo-gun horyo kyosei renko shiryo-shu* [Materials on wartime forced removal of Koreans, Chinese and Allied Forces prisoners of war] II. Ryokuin Shobo (pp. 53-80).

Ministry of Welfare, Ministry of Labor (1939), Chosen-jin rodosha naichi iju ni kansuru hoshin [Policies pertaining to the immigration of Korean workers to the homeland]. In Editorial Committee of the Survey Report on the Forced Removal of Koreans ed. (1999), Hokkaido to chosen-jin rodosha [Hokkaido and Korean workers]. Sapporo Gakuin Daigaku Seikatsu Kyodo Kumiai (p. 483).

Cabinet Decision (1942), Chosen-jin romusha katsuyo ni kansuru hoshin [Policies pertaining to the employment of Korean workers]. In Pak Kyong-Sik ed. (1976), Zainichi chosen-jin kanren shiryo shusei [Materials on Koreans resident in Japan], Vol. 4 (pp. 24-25).

Kokumin Soryoku Chosen Renmei (1944), *Kokumin choyo no kaisetsu – shitsumon ni kotaete ichimon itto shikini* [Explanation of national requisition – in question-and-answer format]. (Yoshio Morita ed., and Government-General of Korea, Mining Bureau, Labor Section, editorial supervision)

Ministry of Home Affairs Department of Social Affairs Section 1 (1924), *Chosen-jin rodosha ni kansuru jokyo* [Conditions of Korean workers]. In Pak Kyong-Sik ed. (1975), *Zainichi chosen-jin kanren shiryo shusei* [Materials on Koreans resident in Japan], Vol. 1. Sanichi Shobo (pp. 445-540).

Institute for Science of Labor (1943a), *Hanto romusha kinro jokyo ni kansuru chosa hokoku* [Survey report on the working conditions of workers from the Korean Peninsula]. In Pak Kyong-Sik ed. (1981), *Chosen mondai shiryo sosho, dai ichi maki: senji kyosei renko – romu kanri seisaku I* [Collected materials on Korean issues, Vol. 1: wartime forced removal, labor management policies I]. Ajia Mondai Kenkyujo (pp. 1-179).

Institute for Science of Labor (1943b), *Tanko ni okeru hanto-jin romusha: Rodo kagaku kenkyujo hokoku* [Korean Peninsula workers in coalmines: report of the Institute for Science of Labor]. In Pak Kyong-Sik ed. (1976), *Zainichi chosen-jin kanren shiryo shusei* [Materials on Koreans resident in Japan], Vol. 5. Sanichi Shobo (pp. 755-778).

Institute for Science of Labor (1943c), Hanto romusha no sagyo noryoku ni kansuru kagakuteki kenkai [Scientific observations on work capacity of Korean Peninsula workers]. In Pak Kyong-Sik ed. (1981), Chosen mondai shiryo sosho, dai ichi maki: senji kyosei renko – romu kanri seisaku I [Collected materials on Korean issues, Vol. 1: wartime forced removal, labor management policies I]. Ajia Mondai Kenkyujo (pp. 3-25).

Rodo Jijo Chosasho (1942), *Hitachi Kozan ni okeru hanto romusha to kataru* [Speaking with workers at Hitachi Mine]. In Pak Kyong-Sik ed. (1981), *Chosen mondai shiryo sosho, dai ichi maki: senji kyosei renko – romu kanri seisaku I* [Collected materials on Korean issues, Vol. 1: wartime forced removal, labor management policies I]. Ajia Mondai Kenkyujo (pp. 56-96).

- Osaka Municipal Government Department of Social Affairs Survey Section (1924), Chosen-jin rodosha mondai [Issue of Korean workers]. In Pak Kyong-Sik ed. (1976), Zainichi chosen-jin kanren shiryo shusei [Materials on Koreans resident in Japan], Vol. 1. Sanichi Shobo (pp. 339-396).
- Osaka Municipal Government Department of Social Affairs Survey Section (1933), *Chosen-jin rodosha no kinkyo* [Current conditions of Korean workers]. In Pak Kyong-Sik ed. (1976), *Zainichi chosen-jin kanren shiryo shusei* [Materials on Koreans resident in Japan], Vol. 5. Sanichi Shobo (pp. 779-816).
- Tokyo District Mining Association (1943), Chosen-jin romu-kanri kenkyu kyogi-kai kaisai yoko [Guidelines on convening meetings of the research and discussion group on labor management of Korean workers]. In Shigeru Nagasawa ed. (1992), II Senji-ka chosen-jin chugoku-jin rengogun horyo kyosei renko shiryo-shu [Materials on wartime forced removal of Koreans, Chinese and Allied Forces prisoners of war] II. Ryokuin Shobo (pp. 143-165).
- Meiji Kogyo-sho, *Meiji kogyo-sho romu geppo* [Monthly labor report of Meiji Mining], various issues. In Eidai Hayashi ed. (1991), *Senji gaikoku-jin kyosei renko kankei shiryoshu II: Chosen-jin I gekan* [Collected materials on wartime forced removal of foreigners II: Koreans I vol. 2]. (pp. 1,153-1,220).
- Joban Mining Company, Shugyo kisoku [Rules of employment] (publication date unknown).
- Fukuoka District Employment Agency (1929), Kannai chosen-jin rodo jijo [Conditions of Korean workers in the district]. In Pak Kyong-Sik ed. (1975), Zainichi chosen-jin kanren shiryo shusei II (2) [Materials on Koreans resident in Japan], (pp. 1,079-1,135).
- Ministry of Justice Criminal Affairs Bureau (1941), Romu doin keikaku ni motozuku naichi iju chosen-jin rodosha no doko ni kansuru chosa [Survey on Korean workers relocated to homeland under the labor mobilization plan]. Shiso Geppo, No. 79. In Pak Kyong-Sik ed. (1982), Zainichi chosen-jin kankei shiryo shusei [Materials on Koreans resident in Japan]. Ajia Mondai Kenkyujo (pp. 1,232-1,251).
- Sangyo Rodo Chosasho (1942), *Inyu hanto romusha no kibo to sono taisaku ni okeru romu kanri* [Labor management issues in coping with requests of Korean Peninsula workers]. *Romu Jiho, No. 185* (Oct. 15, 1942).
- Joban Mining Company (1944), Romu kankei-sha yugu kankei tsuzuri (Showa 19 nen, 20 nen) [Materials on preferential treatment of workers, 1944 and 1945]. In Shigeru Nagasawa (1996), Senjika kyosei renko gokuhi shiryoshu III, Higashi-nihon hen [Collected secret materials on wartime forced removal III, East Japan section], (pp. 381-385).
- Sekitan Tosei-kai Kyushu Chibu (1945), *Tanzan ni okeru hanto-jin no kinro kanri* [Labor management of Korean Peninsula coalmine workers]. In Pak Kyong-Sik ed. (1981), *Chosen mondai shiryo sosho, dai ichi maki: senji kyosei renko romu kanri seisaku I* [Collected materials on Korean issues, Vol. 1: wartime forced removal, labor management policies I]. Ajia Mondai Kenkyujo (pp. 1-257).

- Sekitan Tosei-kai Romubu (1943), *Tanko romu tokei-hyo* [Statistical tables on coalmine workers]. In Shigeru Nagasawa ed. (1981), *Senji-ka chosen-jin chugoku-jin rengo-gun horyo kyosei renko shiryo-shu I: Chosen-jin kyosei renko (Tokei hen)* [Materials on wartime forced removal of Koreans, Chinese and Allied Forces prisoners of war I: Forced removal of Koreans (statistical section)]. Ryokuin Shobo (pp. 313-339).
- Nihon Kozan Kyokai (1940), *Hanto-jin romusha ni kansuru chosa hokoku* [Survey report on Korean Peninsula workers]. In Pak Kyong-Sik ed. (1981), *Chosen mondai shiryo sosho, dai ni maki: senji kyosei renko romu kanri seisaku II* [Collected materials on Korean issues, Vol. 2: wartime forced removal, labor management policies II]. Ajia Mondai Kenkyujo (pp. 1-300).
- Maeda, Hajime (1943), *Tokushu romusha no romu kanri* [Labor management of special workers]. Sankaido.
- Government-General of Korea Industrial Production Bureau. *Chosen kogyo no susei* [Trends in mining in Korea] (1940 edition).
- Government-General of Korea (1942), *Chosen-jin naichi inyu assen yoko* [Guidelines on mediated recruitment of workers relocated to the homeland]. In Pak Kyong-Sik ed. (1976), *Zainichi chosen-jin kanren shiryo shusei, dai 4 maki* [Materials on Koreans resident in Japan, vol. 4]. (pp. 1,254-1,257).
- Government-General of Korea, *Chosen sotoku-fu tokei nenpo* [Annual statistical report of the Government-General of Korea] (1940 edition).
- Sumitomo Mining Company Utashinai Mine (1940a), Chosen-jin rodosha naichi iju ni kansuru jimu tetsuzuki [Administrative procedures for the immigration of Korean workers to the homeland]. In Shigeru Nagasawa ed. (1996), Senjika kyosei renko gokuhi shiryoshu III, Higashinihon hen [Collected secret materials on wartime forced removal III, East Japan section]. Ryokuin Shobo (pp. 13-16).
- Sumitomo Mining Company Utashinai Mine (1940b), *Shugyo annai* [Notice on Terms of Employment]. In Shigeru Nagasawa ed. (1996), *Senjika kyosei renko gokuhi shiryoshu II, Higashi-nihon hen* [Collected secret materials on wartime forced removal II, East Japan section]. Ryokuin Shobo (pp. 21-25).
- Sumitomo Mining Company Utashinai Mine (1945), "Terms Requested and Answer to the Terms Requested," *Shinchu-gun kankei tsuzuri* [Collection of occupation forces related materials]. In Shigeru Nagasawa ed. (1996), *Senjika kyosei renko gokuhi shiryoshu III, Higashi-nihon hen* [Collected secret materials on wartime forced removal III, East Japan section]. Ryokuin Shobo (pp. 409-418).
- Sumitomo Mining Company Utashinai Mine (1941), *Hanto romu-in tori koyo* [Guidelines on control of Korean Peninsula workers]. In Yoshihiko Moriya ed. (1991), *Senji gaikoku-jin kyosei renko kankei shiryoshu II: Chosen-jin I gekan* [Collected materials on wartime forced removal of foreigners III: Koreans I vol. 2]. (pp. 1,443-1,485).
- Ministry of Welfare and Ministry of Home Affairs (1939), Chosen-jin rodosha boshu yoko [Guidelines on recruitment of Korean workers]. In Shigeru Nagasawa ed. (1996), Senjika kyosei

- renko gokuhi shiryoshu II [Collected secret materials on wartime forced removal II]. Ryokuin Shobo (pp. 11-12).
- Ministry of Welfare and Ministry of Home Affairs (1942), *Inyu romusha kunren oyobi toriatsukai yoko* [Guidelines on training and treatment of incoming workers]. In Shigeru Nagasawa ed. (1992), *Senji-ka chosen-jin chugoku-jin rengo-gun horyo kyosei renko shiryo-shu II: Chosen-jin kyosei renko (bunsho hen)* [Materials on wartime forced removal of Koreans, Chinese and Allied Forces prisoners of war] II: Forced removal of Koreans (collected documents)]. Ryokuin Shobo (pp. 55-80).
- Investigative Committee on Victims of Forced Mobilization under Occupation by Imperial Japan (2005), *Working in a Coalmine?* (in Korean).
- Investigative Committee on Victims of Forced Mobilization under Occupation by Imperial Japan (2006a), Where Do You Think You Are Going? Under the Watchful Eyes of Armed Military Police (in Korean).
- Investigative Committee on Victims of Forced Mobilization under Occupation by Imperial Japan (2006b), *The Voyage Over Almost Became a Ghost of the Sea* (in Korean).
- Investigative Committee on Victims of Forced Mobilization under Occupation by Imperial Japan (2007a), *Cruel Farewell* (in Korean).
- Investigative Committee on Victims of Forced Mobilization under Occupation by Imperial Japan (2007b), *Come Right Away if You Are Able-bodied* (in Korean).
- Investigative Committee on Victims of Forced Mobilization under Occupation by Imperial Japan (2009), *From Aomori Through to Hokkaido* (in Korean).
- Kim Min-Yeong (1995), Research on Appropriation of Korean Labor by Imperial Japan [in Korean]. Hanul.
- Lee San-Gui (2014), Features of the Process of Deposit of Uncollected Claims of Koreans in Post-Liberation Japan [in Korean]. Journal of Northeast Asian History, No. 45 (pp. 11-45).
- Lee Woo-Youn (2015), Mobilization of Korean Workers in Wartime Japan and Labor Environment of Coalmines [in Korean]. Naksungdae Institute of Economic Research Working Paper (WP2015-10).
- Chon Gi-Ho (2003), Conditions and Struggle of the Korean Working Class in Japan under Imperial Rule [in Korean]. Chishiki Sangyo-sha.
- Chong, Jin-Song (1989), Employment and Wages of Korean Workers in the 1920s With Focus on Mitsubishi Mining in Japan's Chikuho Region [in Korean]. Korean Capitalism, Hanul (pp. 198-224).
- Jung Hyegyeong (2006), Forced Removal and Forced Labor of Koreans I: Japan [in Korean]. Gyeongin Bunka-sha.

- Jung Hyegyeong (2011), The Empire of Japan and the Requisition of Korean Workers [in Korean]. Seonin.
- Heo Gwangmoo (2014), Unpaid Wages of Forced Korean Workers at the End of Imperial Japan With Focus on Management of Unpaid Wages in the Kyushu Area [in Korean]. Journal of Northeast Asian History, No. 45 (pp. 47-82).
- Kosho Tadashi (2011), Ashio dozan chosen-jin senji doin no kigyo sekinin Murakami Yasumasa no hihan kotaeru [Mobilization of Korean workers in Ashio copper mines and corporate responsibility Response to criticism of Mukakami Yasumasa]. Zainichi Chosen-jin Shi Kenkyu No. 41 (Oct. 2011), pp. 69-81.
- Hayashi Eidai (1991), *Kaisetsu: Senji gaikoku-jin kyosei renko kanren shiryoshu II chosen-jin 1 jokan* [Commentary: Historical materials on wartime forced removal of foreigners II Koreans 1 vol. 1]. Akashi Shoten, (pp. 5-41).
- Pak Kyong-Sik (1965), *Chosen-jin kyosei renko no kiroku* [Record of the forced removal of Koreans]. Pak Kyong-Sik, trans. (2008), *Chosen-jin kyosei renko no kiroku* [Record of the forced removal of Koreans].
- Yamada Shoji (1978), Senjika Joban tanden no chosen-jin rodosha ni tsuite [Wartime Korean workers in the Joban coalfields]. In Yusaku Ozawa ed. (1978), Kindai minshu no kiroku 10 zainichi chosen-jin [Record of modern populace 10: Korean residents in Japan]. Shin Jinbutsu Orai Sha, (pp. 643-652).
- Aizawa Kazumasa (1988), Chosen-jin kyosei renko to sono rodo: seikatsu Iwate ken mukuromi kozan no baai [Korean conscripted labor: everyday life case of Mukuromi mine in Iwate Prefecture]. In Toshio Azuma and Kiyoaki Tanno eds. (1988), Kindai nihon shakai hatten-shi ron [Social development in modern Japan]. Perikan-sha (pp. 227-267).
- Nishinarita Yutaka (1997), Zainichi chosen-jin no sekai to teikoku kokka [The world of Korean residents in Japan and the imperial state]. University of Tokyo Press.
- Moriya Yoshihiko (1991), *Shiharai irai shorui tsuzuri yori mitaru Sumitomo Konomai kozan chosen-jin kyosei renko* [Conscripted Korean workers at the Sumitomo Konomai mine as seen from payment application forms]. *Dohto University Journal No. 10*, (pp. 1-31).
- Moriya Yoshihiko (1995), Chosen-jin kyosei renko ni okeru boshu kanassen choyo hoshiki no ikkansei [Consistency of recruitment, government-mediated recruitment and conscription in the forced removal of Koreans]. Dohto University Journal No. 14, (pp. 13-69).
- Moriya Yoshihiko (1996), *Ajia taiheiyo senso-ka no chosen-jin kyosei renko to ikazoku engo* [Forced removal of Koreans during the Asia-Pacific War and support for bereaved families]. *Dohto University Journal No. 15*, (pp. 81-138).
- Moriya Yoshihiko (2009), Kigyo shiryo-chu kakushu meibo shiryo kijutsu naiyo kara wakaru chosenjin kyosei renko-sha ni kansuru jijitsu [Facts of conscripted Korean workers made known from contents of various registers found among company materials]. In Investigative Committee on

Victims of Forced Mobilization under Occupation by Imperial Japan, *Invitation Workshop for Network Related Persons 3*, (pp. 31-56).

Ichihara Hiroshi (1991), Senjika no chosen-jin tanko rodosha no jittai [Conditions of wartime Korean coalmine workers]. In Enerugi-shi Kenkyu No. 5, (pp. 99-114).

Ichihara Hiroshi (1997), Senjika nihon kigyo no chosen-jin kanri no jittai [Conditions of wartime management of Koreans workers by Japanese companies]. Tochi Seido Shigaku No. 57, (pp. 17-30).

Tonomura Masaru (2012), *Chosen-jin Kyosei Renko* [Forced removal of Koreans]. Iwanami Shinsho.

Hara Akira (1978), *Senji tosei no kaishi* [The start of wartime controls]. *Iwanami shinso nihon rekishi 20: kindai 7* [Iwanami shinsho series on Japanese history No. 20: Modern Japan 7]. (pp. 215-267).

Nagasawa Shigeru (1977), Joban tanden ni okeru chosen-jin rodosha ni tsuite [Korean workers in the Joban coalfields]. In Sundai Shigaku No. 40, (pp. 92-121). As reproduced in Yang Taeho (1993), Chosen-jin kyosei ronbun shusei [Collected papers on Korean forced labor]. Akashi Shoten, (pp. 123-145).

Nagasawa Shigeru (1987), Senjika Joban tanden ni okeru chosen-jin kofu no rodo to tatakai I [Labor and struggle of Korean coalminers in wartime Joban coalfields I]. In Shien Vol. 47 No. 1, (pp. 1-33). Nagasawa Shigeru (1988), Senjika Joban tanden ni okeru chosen-jin kofu no rodo to tatakai II [Labor and struggle of Korean coalminers in wartime Joban coalfields II]. In Shien Vol. 47 No. 2, (pp. 61-95). Both papers are reproduced in Yang Taeho (1993), Chosen-jin kyosei ronbun shusei [Collected papers on Korean forced labor]. Akashi Shoten, (pp. 146-204).

Tanaka Naoki (1968), Dai-niji taisen zenya no tanko ni okeru chosen-jin rodosha – sekitan rengokai shiryo wo chushin ni shite [Korean coalmine workers on the eve of the Second World War – with focus on materials of the Association of Coalmines]. In Chosen Kenkyu No. 72, (pp. 22-36). Tanaka Naoki (1969), Senjika ni okeru tanko rodosha ni tsuite – rodoryoku kosei wo chushin ni shite [Wartime coalmine workers – with focus on workforce composition]. In Keio Gijuku Daigaku Daigakuin Shakai Kenkyu-ka Kiyo: Shakai-gaku, Shinri-gaku, Kyoiku-gaku, Ningen to Shakai no Tankyu No. 7, (pp. 21-33). Tanaka Naoki, Taiheiyo senso zenya ni okeru tanko rodosha ni tsuite – sekitan rengokai shiryo wo chushin ni [Coalmine workers on the eve of the Pacific War—with focus on materials of the Association of Coalmines]. In Mita Keizai-gaku Kenkyu Vol. 12, 1968. Reproduced in the abovementioned Kindai minshu no kiroku 10 zainichi chosen-jin [Record of modern populace 10: Korean residents in Japan] (pp. 565-611), wherein the above three papers appear under the title Senjika ni okeru chosen-jin kofu no koyo jokyo – Chikuho tanzan no jirei wo chushin to shite [Employment conditions of Korean wartime mineworkers – with focus on Chikuho coalfields].

Editorial Committee of the Survey Report on the Forced Removal of Koreans ed. (1999), Hokkaido to chosen-jin rodosha [Hokkaido and Korean workers]. Sapporo Gakuin Daigaku Seikatsu Kyodo Kumiai. Investigative Group on the Forced Removal of Koreans ed. (1974), *Chosen-jin kyosei renko kyosei rodo no kiroku* [Record of the forced removal and forced labor of Koreans]. Gendai Shuppansha.

Cohen, Jerome Bernard (1949), *Japan's economy in war and reconstruction*, Minneapolis: University of Minnesota Press.

Cook, Haruko Taya and Theodore Cook (1992), *Japan at War: An Oral History*, New York: The New Press.

Mitchell, Richard (1967), The Korean minority in Japan, Berkeley: University of California Press.

Palmer, Brandon (2013), Fighting for the Enemy, Koreans in Japan's War, 1937-1945, University of Washington Press. Translated into Japanese by Shioya Hiroshi trans. (2014), Kensho nihon tosei-ka chosen no senji doin 1937-1945 [Verifying wartime mobilization under Japanese rule]. Soshisha.

Wagner, Edward W (1951), *The Korean Minority in Japan*, 1904-1950, New York: Institute of Pacific Relations. Translated into Japanese by Ministry of Foreign Affairs, Asia Bureau, Northeast Asia Section (1987), *Fukkoku-ban: nihon ni okeru chosen shosu minzoku: 1904-1950* [Reprint: the Korean minority in Japan]. Kyukei Shoten. The Korean translation was published in 2002 and was consulted in the writing of this paper.

#### Acknowledgement

I am grateful to Professor Munehiro Miwa for his guidance on matters related to notation and citation.