
Support for Workers Displaced in the Decline of the Japanese Coal Industry: Formal and Informal Support

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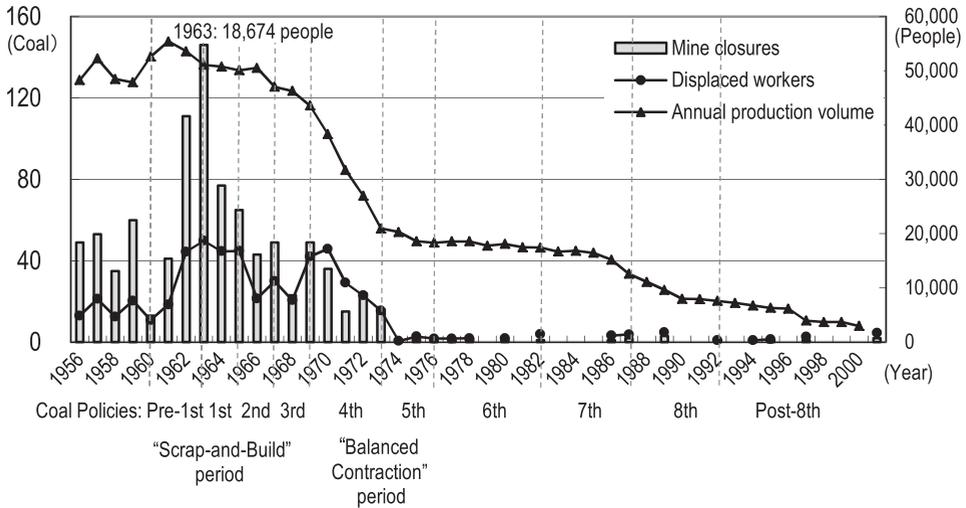
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Japan's coal industry met its demise following a number of stages of restructuring under policies to change the structure of the energy industry. More than 200,000 coal mine workers were displaced from 1955 onward. The task of providing measures for displaced workers was recognized as an issue to be addressed at national level and such initiatives were considered to have considerable significance for the interests of society as a whole. This led to the development of substantial support systems of the kind not seen in other industries, and *comprehensive measures* were adopted to cover not only reemployment, but also relocation, housing, and vocational training. However, fundamental issues faced by the unemployed were left unresolved. Formal support therefore in fact relied on the strength of individual companies and regional communities, and developed distinct characteristics. The insufficiencies of the formal support systems were compensated for by informal support based on personal relationships which were characteristic of the unique culture of coal mining. In particular, there was a strong sense of solidarity among fellow mine workers. The support for displaced workers included not only financial assistance, but also individual support, such as individual counselling and employment assistance provided by former coal mine employees acting as counselors. The labor unions played a central role in developing these measures. Such support was very strongly in tune with the workers' culture generated within coal mining communities.

I. Coal Policy and Measures for Displaced Workers in Japan

The coal industry is a typical example of industrial restructuring in Japan. Alongside the steel industry, the coal industry was considered a key industry and a priority among industrial policies in Japan's postwar recovery period. However, when it faced a downturn in 1953 to 1954, the coal mining industry was faced with the task of rationalization. In 1955, the Act on Temporary Measures concerning Rationalization of Coal Mining was enacted. The severe downturn from 1957 onward then led to a series of mine closures due to rationalization. The Japanese government embarked on its "Scrap-and-Build" policy, which aimed to lower production costs and improve the industry's ability to compete by making

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Source: Compiled with reference to data from the Japan Coal Energy Center (2003).

Note: The numbers of displaced workers given here do not include workers displaced due to rationalizations.

Figure 1. Coal Mine Closures, Displaced Coal Mine Workers, and Annual Production Volumes under Government Coal Policies

distinctions between mines which should be expanded through government investment and mines to be left as they were or marked for early closure (Employment Promotion Corporation 1992a, 125). From the introduction of the First Coal Policy in 1963 onward, the coal industry was at the mercy of a series of nine changes in policy over the 40 years until 2002 (See Figure 1).

The policy changes were conducted against a background of competition with both oil and imported coal. These developments were also accompanied by growing movements in the international coal industry toward nationalization and unifying companies into single corporate groups, such as the nationalization of the British coal mining industry and the introduction of government support for coal mining companies in Germany. However, nationalization or other such approaches were not adopted in Japan, where mines remained under the management of private companies, mainly *zaibatsu* conglomerates, until the end of the coal industry.¹ As such, the Japanese coal industry met its demise following a long process of several stages of restructuring under policies to change the structure of the energy industry. From 1955 to 2002, 928 coal mines were closed and more than 200,000 workers were displaced due to mine closures. At present, the only mine where drilling is still conducted is the Kushiro Coal Mine Co. Ltd., where it is carried out for training provided to

¹ See Culter (1999, chap. 1) and Shimazaki (2010, 2015) for more on the processes of restructuring in the coal industry in Japan.

visiting engineers from abroad as part of international technology transfer programs conducted by the Japan Coal Energy Center (JCOAL). These programs also include sending Japanese expert engineers to participating countries.

From 1953 onward, unemployment and poverty issues for displaced coal mine workers were already escalating in coalfield regions, mainly in the Chikuhō region of Kyūshū.² These issues formed the background to the enactment of the 1959 Act on Temporary Measures for Displaced Coal Mine Workers. The act was a “special legislation to provide long-term and comprehensive measures for displaced coal mine workers, strongly taking into account the structural nature of the downturn in the coal industry, the occurrence of high concentrations of displaced coal mine workers in regional communities, and the difficulties of reemployment placements which necessitate relocation” (Employment Promotion Corporation 1992a, 128). Namely, this was an undertaking to go beyond the “stopgap measures largely focused on absorbing unemployed workers into public initiatives and projects for unemployment measures,” which had been pursued up until that point, to provide “comprehensive measures for displaced coal mine workers,” including reemployment placements across a wide area, vocational training, and assistance services (Employment Promotion Corporation 1992a, 129).

In 1963, the Act on Temporary Measures for Displaced Coal Mine Workers was amended, developing a framework to ensure that mining rights holders were obliged to provide employment support measures³ and to establish the Unemployment Insurance System for Displaced Miners (the “Black Notebook System”). Through the Black Notebook System, the support framework was changed into a benefits system based on the notebook, as opposed to the former approach, which had been aimed at arranging for displaced workers to be absorbed into other programs, such as emergency employment programs and unemployment-relief programs (Employment Security Bureau, Ministry of Labor 1971, 209). The Black Notebook System remained in use for around 40 years until the abolishment of the Act on Temporary Measures for Displaced Coal Mine Workers in 2002.

It is also important to note—although it will not be explored further in this paper—that the framework of measures for displaced coal mine workers was also supplemented by the coal industry’s unique pension system. Under the coal-mining pension system, the coal mine proprietors bore the cost of the premiums (70 yen per ton of coal produced), and the Coal Mining Pension Fund, which was established in 1967, continues to

² See Yoshimura (1984) for a detailed account of the situation regarding unemployed workers from medium and small-sized coal mines in the Chikuhō region from around 1954 to FY 1958. More on the hierarchy in Chikuhō can be found in Smith (2005).

³ Article 7 states: “Holders of mining rights...must cooperate with the Public Employment Security Office and the Employment Promotion Corporation to take the necessary measures regarding developing job vacancies and providing other forms of assistance for finding employment, in order to promote employment opportunities for coal mine workers who have been forced to leave their jobs due to cases of rationalization in the mining industry, such as the cessation of mining or the modernization of coal mine shafts.”

handle the payment of pension benefits. This pension was paid to retired workers in addition to employees' pension insurance. Moreover, the age from which former workers were eligible to begin receiving pension payments was earlier than in general industry, and this had the effect of curbing the escalation of problems regarding the reemployment of older displaced coal mine workers.

As shown above, while the Japanese coal industry was not placed under a framework of government management, measures for displaced coal mine workers were recognized as an issue to be addressed on a national level, rather than simply being seen as the specific problems of private companies or each coal mining area. Support measures were recognized as national initiatives of considerable significance for the interests of society as a whole. Government funding injected into measures for displaced workers and other coal policies apparently rose to four trillion yen (nominal value) in terms of the budget allotted (Shimanishi 2011, 7). The scale and importance of the coal industry in Japan, and the high concentrations of unemployed in regional communities were the main factors which led to the development of such substantial systems specifically for displaced coal mine workers. Sugauma (1997) also highlights the following three political and economic factors (Sugauma 1997, 38). Firstly, the tenacity of the coal mine labor movement played a role in the development of measures. With the significant political influence of the labor movement in the background, a key motivation for such measures was avoiding social unrest. Secondly, in the process of Japan's postwar recovery, the coal industry was revitalized as an industry with strong elements of state control, and the government was in a sense effectively responsible for guaranteeing employment in the industry. Thirdly, the awareness of external downturn due to shifts in the international structure of energy demand also played a role, as change in the structure of the industry was regarded as an inevitable industrial crisis originating from external factors. This crisis was thought to exceed the capacity of the management efforts of employers, labor unions and other parties concerned, and intervention in the form of government policy was seen as unavoidable.

In the light of the processes of restructuring in the coal industry noted above, this paper outlines how displaced coal mine workers found careers in other businesses and industries, and how the employment measures and support which were provided assisted them in doing so. This reveals the following two points. Firstly, although the Unemployment Insurance System for Displaced Miners (Black Notebook System) was developed to support displaced coal mine workers, fundamental issues were left unresolved, and as a result, support for displaced workers relied on the strength of individual companies and regional communities. Secondly, personal support founded on the unique culture of coal mining, in particular the sense of solidarity among workers, has compensated for the insufficiencies of the formal support systems.



Figure 2. Major Coalfields and Major Cities in Japan

II. Relocation of and Support for Displaced Coal Mine Workers

1. Reemployment and Relocation of Displaced Coal Mine Workers

Displaced coal mine workers had three distinctive characteristics. Firstly, they were concentrated in regional areas (and peripheral regions), reflecting how the coal industry came into existence and its modes of labor. Secondly, it was difficult for displaced workers to switch to employment in a different industry. Thirdly, their displacement from work also led to their family losing the entire foundations upon which their lives were built. Displaced workers had no choice but to enter a different form of employment, which meant relocating within society, while at the same time relocating to a new region. The relocation of large numbers of displaced workers had the potential to place entire regional communities on the verge of collapse, as it exerted their influence on many areas, including not only the economy of coal mining areas but also issues related to children's education and welfare for the elderly.

At this point, let us introduce the main coalfields in Japan. As shown in Figure 2, there were large-scale coalfields in Kyushu and Hokkaido, considerable distances from major urban areas such as Tokyo, Osaka, and Nagoya. The development of the coal industry

began towards the end of the 19th century. Initially focused in the Kyushu area, it was later expanded to include Hokkaido. As a result, decline in the coalfield regions began in Kyushu. In Hokkaido, new coal mines were still being established up until the 1980s.

It was difficult for displaced coal mine workers to seek employment in other industries, due to the specialist nature of the technical skills they acquired in coal mining, and due to the fact that, in the case of coal-miners who worked inside the mine shafts, wages were relatively high. Moreover, there were five trends evident in the wishes of displaced coal mine workers seeking employment: many overall wished to remain in the places where they grew up; particularly the younger ones wished to find employment at an early stage; older workers, in particular, strongly wished to be employed by other coal mines; workers wished to live in housing provided by their new place of work; and workers, again primarily the younger ones, wished to receive vocational training in preparation for entering work in a different industry (Shimazaki 2012).

Bearing in mind the characteristics of displaced workers described above, there were five types of businesses or other entities which were able to take in such workers. Firstly, “second companies” or “second mines”—namely companies or mines established in the process of a closure as a potential means of redeveloping the closed mine or business—played a significant role in providing reemployment for displaced workers from the “Scrap-and-Build” period (1959–67) to the “Balanced Contraction” period (1968–72). However, the future prospects of such companies were low. This led to a mismatch, because older workers who remained in their hometowns wished to be employed by such companies in order to avoid having to change industry, but employers had a strong tendency to employ younger people with the aim of strengthening operations.

The second type of businesses that could take on displaced workers were other coal mines. As will be described later in this paper, in Hokkaido efforts to find reemployment for displaced coal mine workers at different mines (generally referred to as *tanko-fukki*, which can be translated as “returning to mining work”) were made a priority due to the chronic shortage of labor in “build mines,” these mines which were to be expanded through government investment. For example, the Mitsubishi Minami Oyubari Mine, which was established in 1966 as a “build mine,” was formed by employing coal mine workers who had been displaced due to closure of other mines. At the height of its prosperity, 1,540 workers were working at the mine.

Thirdly, affiliated companies also offered reemployment to displaced workers. Such companies were the result of major coal producers diversifying or transforming their management, and they were also recommended by the government in coal industry policies. Companies established in the local towns of coal mines in particular functioned as the main locations for taking on displaced workers in the local area. In the case of *zaibatsu* conglomerates, it was also possible to absorb workers into group companies.

The fourth type of reemployment opportunities were positions in general industries, which played a pivotal role in displaced coal mine workers finding reemployment in indus-

tries other than coal mining. As part of policies to develop coal mining areas, efforts were made to attract companies to set up business in the local areas, but these efforts met with difficulty. As a result, most reemployment placements for displaced workers were organized through placement services operating over extensive areas. Reemployment therefore inevitably involved relocating to a different region, and significant numbers of workers relocated from Kyushu to the Kinki region (Osaka and Hyogo prefecture) and Chubu region (Aichi prefecture), and from Hokkaido and the Joban region to the Keiyo and Keihin Industrial Zones in the greater Tokyo area. Efforts to develop employment opportunities in general industry also included active efforts to encourage companies to employ displaced workers in groups, both through mass recruitment and through hiring older workers and white-collar employees together with younger workers in packaged groups. Employment in general industry was at the core of measures for displaced workers. However, for displaced coal mine workers, employment in general industry meant converting industry and relocating to a different region, and the particular challenge of adapting to urban life. There was therefore a strong tendency among workers to have reservations regarding reemployment in general industries. One of the solutions for this was for workers to be employed in groups.

The fifth option for displaced workers was pursuing vocational training as preparation for the necessities of changing industry and relocating as described above. There were also workers who attended vocational training on the basis of a guarantee of employment with a company in another industry. Many displaced workers, in particular younger workers, requested the opportunity to take vocational training.

Given that, workers were motivated to seek employment and there were businesses to take them, as well as other options, under the Black Notebook System displaced workers successfully reentered employment within the period for which unemployment insurance benefits⁴ were provided and the subsequent period during which employment promotion benefits were paid (a total of three years). The result can be seen from statistics of the trends in displaced workers in each region.⁵ Of course, the ability of workers to find reemployment varied depending on the coal mining area, the timing of the coal mine closure, the characteristics of the coal producer, and the individual characteristics of each worker. Table 1 presents a section of the trends in workers displaced due to coal mine closures from 1963

⁴The number of days for which workers could receive unemployment insurance benefits was initially 270 days but was later extended. In the case of Ikeshima Mine and the Taiheiyo Mine, the last two mines to close, the unemployment insurance benefit period was extended to 330 days. This reflects just how severe the situation was for displaced workers. In fact, the potential for displaced workers to secure new employment differs significantly according to timing of the closure (Shimazaki 2012).

⁵From the launch of the Black Notebook System in FY 1962 up until FY 1970, the trend in reemployment of displaced coal mine workers across Japan (116,250 people) was such that 83.9% of workers entered employment in secondary industries—of that 83.9%, 72.5% entered employment in the manufacturing industry, and 7.9% in the construction industry. 53.0% of workers relocated outside of the prefectures of coal mining regions, with the highest percentage, 25.6%, relocating to Aichi Prefecture. From the Employment Security Bureau, Ministry of Labor (1971, 341, reference table 4–20).

Table 1. Numbers of and Trends in Workers Displaced Due to Coal Mine Closures
(Includes only the mines covered in this paper and a selection of other mines)

Name of mine	Date of closure	Region	Number of displaced workers	Net number of displaced workers who sought reemployment	Percentage reemployed	Timing of calculation of reemployment percentage (months after dismissal)
Kaijima (Sixth rationalization)	September 1966	Fukuoka	1,923	1,839 ^a	91.7	9
Yubetsu	February 1970	Hokkaido	2,328	1,925 ^a	96.8	12
Joban	April 1971	Fukushima	4,702	4,171 ^b	91.2	16
Sumitomo Ponbetsu	October 1971	Hokkaido	2,335	2,032 ^a	69.0	5
Sumitomo Utashinai	October 1971	Hokkaido	1,124	943 ^a	79.2	5
Hokutan Yubari Shinko	October 1982	Hokkaido	1,905	1,711 ^b	57.6	3
Mitsui Miike	March 1997	Fukuoka, Kumamoto	1,553	1,317 ^a	80.9	50
Ikeshima	November 2001	Nagasaki	1,214	954 ^a	49.7	35
Taiheiyo	January 2002	Hokkaido	1,066	1,016 ^b	70.7	36

Sources: Kaijima: Takahashi and Takagawa (1987); Yubetsu, Sumitomo Ponbetsu, and Sumitomo Utashinai: Hokkaido Employment Aid Association for Displaced Coal Mine Workers (1978); Joban: Shimazaki (2004); Hokutan Yubari Shinko: Oba (2011); Mitsui Miike: Kodama (2001); Ikeshima: Hama (2004); Taiheiyo: Shimazaki and Sudo (2012).

Notes: ^aWhite-collar employees, miners, day laborers (temporary workers, subcontractors).

^bWhite-collar employees, miners.

onward.

For example, the closure of the Joban Coal Mine (Iwaki City, Fukushima Prefecture) in 1971 saw the largest number of workers discharged in the closure of a single mine in Japan, with 4,702 people discharged from their jobs. 91% (3,804 people) of those who sought reemployment (4,171 people) had entered new employment within 16 months of being discharged (Shimazaki 2004). 993 people (24%) entered employment at the Seibu Coal Mine, the second company mine newly established as part of the closure, and 2,612 people (63%) entered employment in other industries. Many of those who entered other industries joined affiliated companies in the local area, but 1,115 people (27%) relocated outside of Fukushima prefecture, mainly to Tokyo, Chiba, and Kanagawa.

2. Content of Measures and Support for Displaced Workers

(1) Frameworks for Measures for Mine Closures and Displaced Workers

It is not easy to arrange reemployment opportunities for almost 5,000 displaced workers and arrange their relocation in a short period of time, as was the case at the Joban Coal Mine. These measures were developed over a long period, as a large-scale project involving not only the mine itself but also the regional community as a whole (Shimazaki 2004, 44–46). This section of the paper begins by analyzing the Joban Coal Mine as an example of establishing the types of measures and support provided for displaced workers by coal producers, labor unions, and local regional communities.⁶

In the case of the Joban Coal Mine, labor and management representatives established a headquarters for employment measures and began collecting information on potential reemployment opportunities in mid-February in preparation for the closure of the mine on April 29, 1971. The headquarters also conducted a survey of all workers due to be dismissed to ascertain their intentions regarding seeking reemployment. At the same time, the local region, Iwaki City, in collaboration with the Public Employment Security Office—the government-run employment placement and counselling agency—established a framework to develop new job opportunities, provide employment counselling, and introduce employment opportunities. Under this framework, the actual employment measures were energetically pursued from directly after the closure of the mine until the end of unemployment insurance benefits in May 1972. The four fundamental tasks for the employment measures headquarters were securing mass recruitment offers, promoting the employment of older workers, developing new employment opportunities in local companies, and persuading workers to accept reemployment outside of the prefecture.

As described above, work on measures for displaced workers began at the stage at which the timing of the mine closure was decided, prior to the conclusion of the official agreement between labor and management regarding the closure. As a result, the framework was already in place by the time the mine closed. The measures were also conducted with

⁶ See Shimazaki (2011a, 2011b) for more information on the Joban Mine.

the aim of securing reemployment for the displaced workers within the period in which they would receive unemployment insurance benefits. This was achieved through a framework based on collaboration between two entities. One of these was the coal producer or the operator of the mine location, which initiated the company's departments for employment measures and employment placement, and the employment placement committees established by labor and management. The others were local government entities, responsible for organizing the labor-related departments in each prefecture, the local Public Employment Security Office, the branch of the Employment Promotion Corporation, and the liaison councils of other related locations.⁷

(2) Individual Support: Counselling and Employment Placement Assistance by On-Site Counsellors

Naturally, reemployment following displacement was the problem of the individual worker, and workers required specific individual counselling and support in order to secure reemployment. This mainly involved matching up the wishes of the displaced worker with employment opportunities.

In the case of the Joban Coal Mine, activities to secure new employment for displaced workers began on May 5, shortly after the closure of the mine. At that point, the number of job openings was a total of 11,250 positions in 548 companies, but the number of opportunities in local companies was noticeably limited, with only 114 companies and 2,852 positions available (including affiliated companies). The employment measures headquarters and the Public Employment Security Office therefore pursued counselling and employment placement efforts which focused on both developing new opportunities in local companies and placing workers in employment outside of the prefecture.⁸

Looking at the reemployment placements secured as a result of these efforts, the number of workers placed through mass recruitment rose to 1,457 people overall. 11 companies hired at least 20 employees each, with the largest number, 993 people, being hired by the Seibu Coal Mine, which was the second newly established mine. Three other companies hired 100 people, 72 people, and 59 people respectively. 464 of the total 1,457 placements were outside of the prefecture.

As described above, in addition to receiving financial support in the form of unemployment benefits and other means, displaced workers also received individual support with finding reemployment and relocation. For example, a number of events were hosted, such as information sessions for all workers on unemployment insurance and other such matters, information sessions on employment (including company presentations, and counselling sessions), and on-site visits. Individual support was provided by using formats such as "employment counselling cards" to conduct surveys to ascertain the wishes of workers, and

⁷ The situation of the closure of the Kaijima Mine in 1970 is given in detail in Takahashi and Takagawa (1987).

⁸ For more details, see Shirai (2001).

conducting interviews using the information collected in such surveys to introduce and explain suitable employment opportunities. In many cases, the wives of displaced workers also attended interviews. Workers and their partners sought a wide range of advice at the interviews, including information on salaries and allowances at the place of reemployment, matters regarding housing and schools for their children, problems regarding elderly parents, and employment opportunities for the wives of workers after migration.

When it came to making the final decision on the new place of employment, many displaced workers did not have criteria on which to make a judgment, and it was necessary to give them a supportive push forward. People involved in providing such support described the situation as follows: “There were few displaced workers who had their own criteria for making judgments. There were many people who ultimately struggled to make a decision, and felt that they had no choice but to choose between going by the opinion of an influential person close to them, following the recommendation of the advisor at the Public Employment Security Office, or relying on the advice of the employment placement department or the labor union of their mine” (Takahashi and Takagawa 1987, 103). Support providers also noted the following difficulties: “The Public Employment Security Office (“PESO”) provides employment guidance for displaced workers (and all unemployed people) on the assumption that they have the “will and ability to work,” which is the basis of receiving unemployment benefits. However, it is hard to provide such guidance due to the fact that the workers seeking support have difficulty in expressing themselves, a difficulty which is characteristic of coal mine workers. The displaced workers are suspicious of the employment guidance provided by PESO regarding their will to work, and are concerned that their unemployment benefits will be discontinued. This creates the impression for workers that PESO is a brutal organization which they need to be wary of, and with such a relationship it is difficult for displaced workers to choose the right jobs for them and this in turn affects the stability of their daily lives” (Okuda 1992, 437).

On-site counsellors therefore played a key role in acting as a go-between between the displaced workers and the Public Employment Security Office. These counsellors were employees commissioned by the Employment Promotion Corporation, an agency established by the national government. They were responsible for a broad range of tasks, mainly focused on counselling sessions for displaced workers and those entering reemployment, with the aim of “promoting the reemployment of displaced coal mine workers and ensuring the stability in their daily lives.”⁹ They were selected on the recommendation of the labor union, and in many cases union officers were commissioned to take on these roles. As they were not employees of the coal producer or full-time union officials, and were also former

⁹ In addition to providing counselling sessions, the on-site counsellors had a number of tasks including liaising between employment seekers and the Public Employment Security Office on a wide variety of matters, responding to requests for advice regarding relocation, etc., providing counselling and guidance on lifestyle matters, and collecting information on new employment opportunities (Employment Promotion Corporation 1992b).

coal-mine workers well-known to the displaced workers, their advice was reassuring for the displaced workers who were not sure which way to turn after the closure of their mine.

These on-site counsellors also provided support for workers migrating to their new place of employment. There is a record of an employee who provided support for displaced workers at the Kaijima-Onoura Mine in Kyushu in 1976 as a member of the mine's employment placement department (Takahashi and Takagawa 1987, 102). This record notes that members of the employment placement department and on-site counsellors together provided all necessary support for migrations of large numbers of workers, including preparations and arrangements (also arranging for railway companies to increase train services), liaison, accompanying and escorting workers relocating alone to their new place of work, arranging for the transport of household belongings, and seeing off workers at the time of their departure. As a result, approximately 100 households, including both workers and their families, migrated from Kyushu to Tokyo, Osaka, and other locations within just one week.

One of the factors which explain why such substantial support and measures were adopted is the existence of coal mining communities which had formed in coal mining areas within the structures of companies and labor unions. These communities encompassed all aspects of the daily lifestyles of workers and their families, cultivating "fellow miners stick together" and "one mine, one family" mentalities which strongly influenced the measures which were adopted to support displaced workers (Ichihara 1997, 371).

(3) Follow-Up Support for Reemployed Workers

The aim of support for displaced workers in the short-term was to find them new employment and support their subsequent relocation. However, in the long-term, the aim of support was to ensure that workers were settled in their new place of work. In order to do this, it was necessary to provide follow-up support to workers after their relocation. The follow-up support provided for displaced workers included visiting workers just after they had started work at their new place of employment to check up on them and make sure there were no problems, dealing with complaints, and providing guidance on how to settle in, as well as visiting workers around one year after they started work at their new place of employment. The latter was to respond to matters such as cases in which workers had been dismissed or had their status altered following the expiry of the employment stabilization subsidy paid to the company which employed them. In fact, a considerable number of workers became unemployed again after one year.

Follow-up surveys were considered an important part of the duties of the departments responsible for assisting with employment arrangements (Takahashi and Takagawa 1987, 107–8), and were conducted by on-site counsellors and labor union officers. For example, at the Shakubetsu Coal Mine (Hokkaido), which closed in 1970, a large-scale follow-up visit was carried out four months after the closure of the mine (Shakubetsu Labor Union 1970, 27–45). According to the visit records, which can be found in a publication to commemorate the dissolution of the labor union, two labor union officers visited 10 coal mines and 15

general industry locations in Hokkaido over a period of 20 days, and then went on to visit 10 other prefectures. The aim of the visit was to give encouragement to reemployed workers, to conduct surveys to ascertain the situation since these workers had entered employment, to deal with issues related to administrative matters, and other counselling duties. As far as the records of the visit suggest, former workers gave vent to feelings of being at a loss in their new places of employment, and the visiting labor union representatives responded by expressing their understanding and words of encouragement.

Interview surveys which I have conducted also confirm how reassuring such follow-up visits were for those who had relocated (Japan Association for Study of Former Coal Fields 2014, 136–37). Although it was already 21 years after his relocation, a displaced coal mine worker interviewed for these surveys still recalled two counsellors visiting him several times after he relocated from a major coal mine in Hokkaido to the suburbs of Tokyo in 1992. This worker was reemployed as a regular employee for a manufacturing company in the suburbs of Tokyo along with two of his friends. In relocating to Tokyo, he left his family behind in Hokkaido, and moved into the company dormitory. The following March he brought his family to live with him in Tokyo, and moved into housing run by the Employment Promotion Corporation. As there was a ten-year limit on the period of time in which he and his family could live in the housing, he later acquired his own house, in which he currently still lives. Following mandatory retirement he was again reemployed as a contract employee. He apparently still exchanges greeting cards at New Year with fellow former mine workers and counsellors from the mine.

III. Support for Displaced Workers in Hokkaido: Establishment of the Hokkaido Employment Aid Association for Displaced Coal Mine Workers and Assisting Workers to “Return to Mining Work”

1. Mines Closures in Hokkaido and Establishment of the Aid Association

From the 1960s onward, the center of the coal supply industry shifted from Kyushu to Hokkaido. Hokkaido remained the center of the coal industry until the industry’s demise, and a number of mine closures and rationalizations occurred there over a long period of time. Support for displaced workers in Hokkaido was handled by an association that was formed to act as the core for providing support. This section of the paper will introduce the establishment and role of that association.

The Hokkaido Employment Aid Association for Displaced Coal Mine Workers (“the Aid Association”) was established in 1968 as an organization responsible for arranging the reemployment of Hokkaido’s coal mine workers displaced following the closure or rationalization of mines, with a particular focus on arranging for displaced workers to return to mining work. The Aid Association provided support for displaced workers in Hokkaido for 38 years until it was dissolved in 2006. Following its establishment, there were 80 coal mines, and 39,194 people requiring its support (Hokkaido Employment Aid Association for

Displaced Coal Mine Workers 2006, 2).

The Aid Association was a private-sector organization, and it was the Japan Coal Miners Union Hokkaido Regional Headquarters (JCMUH) that played a central role in its establishment. At the time of the Aid Association's establishment, there were almost 800 older workers who had remained in a certain coal mining area with no progress toward reemployment, and it was a matter of pressing importance to find reemployment for these workers. Moreover, problems were also arising regarding the difficulties displaced coal mine workers had in adapting to living in urban areas, particularly in Sapporo, such as becoming caught up in fraud incidents. The JCMUH was receiving "a constant stream of consultations." According to the workers themselves, "in terms of seeking help from organizations, naturally, displaced workers relied on the JCMUH as the only place to turn to, as it was part of the Coal Miners' Union." The JCMUH therefore established the Aid Association as a private-sector aid association in Sapporo, as an organization which would provide displaced coal mine workers with "counselling on all kinds of matters," and would aim to "pursue initiatives to provide the earnest and genuine support which can only be provided by the private sector" (Hokkaido Employment Aid Association for Displaced Coal Mine Workers 1978, 89).

The Aid Association had two main types of tasks: providing assistance and developing initiatives. The association's tasks for providing assistance included: (i) pursuing activities to support the reemployment for workers displaced due to rationalization following mine closures; (ii) developing measures to assist workers who were still unemployed and remained in the same place without progress toward reemployment; (iii) providing counselling; (iv) assisting workers with organizing housing; (v) pursuing organizational measures; (vi) conducting surveys (mainly follow-up surveys), and (vii) publicity activities. These tasks are the equivalent of the main responsibilities of the aforementioned employment measures departments founded by labor and management in other coal mining areas. Of these tasks, the first—assisting with the reemployment of displaced workers—involved duties such as conducting on-site guidance, running courses to promote reemployment, developing new job opportunities, providing guidance for workers on settling into their new jobs, and visiting workers to provide counselling.

2. Relocation for "Returning to Mining Work"

The reemployment support provided by the Aid Association was mainly focused on assisting displaced workers in returning to employment in mines as opposed to changing industry. As mentioned earlier in this paper, the situations faced by coal mines in Hokkaido diverged in two opposite directions—while at a number of mines workers were being displaced as a result of closures and rationalizations due to coal policy, at "build mines" there was a chronic lack of labor (Ichihara 1997, 371). One of the main focuses was to ensure that mines, in particular the "build mines," would continue to supply coal and avoid "labor-related mine closures." The coal producers and labor unions therefore shared the same

interests, and were able to establish a support system under which labor and management came together as one.

Statistics of reemployment trends from the Aid Association and each mine demonstrate that returning to mining work played a significant role as a means of reemployment for displaced workers. For example, in the closures of the Sumitomo Utashinai and Sumitomo Ponbetsu mines in 1971 a total of 4,716 people were dismissed—1,661 at Utashinai and 3,055 at Ponbetsu. Five months after the closure, 2,150 of the 3,459 people seeking reemployment had entered reemployment, of which 988 people had returned to employment at a mine. Of these 988 people, 575 were reemployed by another Sumitomo group mine at Akabira, and the remaining 413 people relocated to 14 mines and 24 coal mine subcontracting companies.¹⁰

When these two Sumitomo mines were due for closure, a temporary center for comprehensive employment counselling was established on site over a period of five months and sessions were held to provide workers with information on the assistance available. The Aid Association also made intensive efforts to provide support, assigning one counsellor to each mine to provide support on site.

Employees who returned to employment at mines were relocated to a large number of different mines, as opposed to being concentrated at a certain mine. In other words, relocations were not allotted systematically, but reflected the wishes of individual employment seekers and other factors. While this is described as “returning” to mining work, it was not simply a case of exchanges between the coal company dismissing workers and the coal company wishing to employ workers, but was reemployment in accordance with the official recruitment and employment seeking procedures based on the Unemployment Insurance System for Displaced Miners (the Black Notebook System).

3. Characteristics of Support Centered on the Initiatives of the Aid Association: Formal and Informal Support

As described above, the Hokkaido Employment Aid Association for Displaced Coal Mine Workers acted as a permanent organization to take responsibility on behalf of the coal producers and labor unions for employment assistance measures on the closure of each coal mine. It is understandable, while somewhat paradoxical, that this made it possible for major coal producers in Hokkaido to strategically pursue rationalization along their own unique methods from 1971 onward.

I shall now examine four points regarding the characteristics of the support provided to displaced workers in Hokkaido, which was conducted mainly by the Aid Association. Firstly, excluding workers who entered reemployment at mines, the majority of displaced workers who were relocated within Hokkaido relocated to Sapporo, Hokkaido’s largest city.

¹⁰ These figures are for December 30, 1971. The figure for the total number of workers who returned to employment at a mine was 35 people higher at the end of March 1972.

The support provided by the Aid Association was also developed with Sapporo as a base. (For this reason, initiatives to support workers displaced following the closure of the last mine to close, the Taiheiyo Mine in Kushiro, eastern Hokkaido, were hindered due to the practical distance of the mine from Sapporo.¹¹) Among other tasks, it was essential to make efforts to encourage the development of employment opportunities and the construction of Employment Promotion Corporation housing in Sapporo. In terms of the individual support provided to displaced workers, an earnest approach was also taken towards problems regarding the education of workers' children (problems concerning transferring schools, in particular, problems related to transferring senior high schools). Support providers were also aware from an early stage of the problems regarding nursing care for workers' elderly parents and older people "left behind" in coal mining areas. Efforts were made to encourage the Hokkaido local government to increase the number of home caregivers as a means of supporting older people.

Secondly, counselling for displaced coal mine workers living in Sapporo was carried out on an ongoing basis, and displaced workers sought counselling on all aspects of lifestyle matters. Just as the JCMUH had proposed when establishing the Aid Association, counsellors aimed to provide workers with "earnest and genuine support, by really understanding them through face-to-face counselling in which they shared workers' concerns, troubles, and happy developments" (Hokkaido Employment Aid Association for Displaced Coal Mine Workers 2006, 2). From the late 1970s onward, the economic slump led to an increase in the number of cases of housewives seeking counselling regarding employment, to the extent that in the 1978 and 1979 fiscal years the association was considering the possibility of assigning a counsellor specifically for women's issues (Hokkaido Employment Aid Association for Displaced Coal Mine Workers 1988, 67).

Such support apparently also incorporated collaboration with groups known as "*yama-no-kai*" ("societies for former mine workers"), which were formed by displaced coal mine workers living in Sapporo. At their peak, there were as many as 21 *yama-no-kai* in Sapporo (all of these societies had been dissolved by 2012 due to the aging of their members). The fact that the *yama-no-kai* acted as a focal point for maintaining a consistently strong sense of solidarity among mine workers—which extended to those who had remained in the coal mining areas—helped to supplement the support provided by the Aid Association.

Thirdly, it should also be noted that follow-up surveys and surveys of workers who remained in mining areas were also conducted on an ongoing basis (Hokkaido Employment Aid Association for Displaced Coal Mine Workers 1978, 90, 140–42, 157–59, 180–81, 198–99, 219–20, 235–36). According to records, surveys were planned every year from 1970 onward. 2,000 people were selected from all displaced workers for a survey of work-

¹¹ An interview survey with a former executive of the Hokkaido Employment Aid Association for Displaced Coal Mine Workers.

ers who had entered reemployment in general industry, initially mainly in Sapporo, to survey the actual conditions of displaced coal mine workers. This later became a plan to select a specific mine and follow up on all workers displaced from that mine, but this did not proceed according to plan. It is recorded that as a result a survey of workers living in Employment Promotion Corporation housing was carried out annually in a systematic manner.

As shown above, as far as close examination of the records suggests, the Aid Association adopted a considerable amount of responsibilities. In 1982, because of a serious accident and resulting closure by the government, at the most promising “build mine,” the Yubari Shinko Mine, it apparently became difficult for the Aid Association to provide employment support and support for returning to employment in mines to the accumulating number of workers who remained in their home areas. It seems that from 1982 onward the Aid Association struggled to tackle with its growing responsibilities, such as developing new employment opportunities.

Finally, the fourth point to address is that while the Aid Association was formed by “labor and management coming together as one,” it is fair to say that the actual work was carried out by the JCMUH. For this reason, as symbolized by the formation of the *yama-no-kai*, while the Aid Association was related to the political activities in the JCMUH, in terms of its roles as an organization, a distinction was drawn between the Aid Association and the Welfare Council for Displaced Coal Mine Workers, which was established in 1970 as an organization responsible for political activities.

IV. Conclusion: The Effects and Challenges of Relocation Support

As this paper has demonstrated, in Japan the processes of restructuring in the coal industry occurred over a prolonged period of time, and in that period large numbers of coal mine workers were displaced. The Japanese government recognized the relocation of these workers within society—which included those starting a new career in a different industry—as an issue for the nation as a whole, as opposed to the individual problems of private companies and each coal mining area, and adopted *comprehensive measures*, including measures not only for reemployment, but also relocation, housing, and vocational training. These were substantial measures and support systems of the kind not seen in other industries. However, fundamental issues of the unemployed were left unsolved. As shown in this paper, formal support for displaced workers therefore in fact relied on the strength of individual companies and regional communities and exhibited distinct characteristics. The insufficiencies of the formal support systems were compensated for by informal support based on personal relationships which were characteristic of the unique culture of coal mining. In particular, there was a strong sense of solidarity among fellow mine workers.

In concluding this paper, let us summarize the evidence which demonstrates the key role played by informal support. When facing closure, each mine developed not only financial support, but also individual, personal support in the form of individual counselling and

assistance with employment placement for displaced workers changing industry, mainly provided by on-site counsellors. As the case of the Employment Aid Association for Displaced Coal Mine Workers in Hokkaido clearly shows, the labor unions played a central role in providing these measures. Such approaches by the labor unions were possible due to union shop agreements and the fact that as in other industries in postwar Japan, workers were affiliated with both their company and their labor union.

Labor unions of closing mines also regarded providing support for displaced workers as a given part of their responsibilities. The background to this can be explained by looking at the situation in Hokkaido. It would appear that in Hokkaido the Japan Coal Miners Union, which had guided the approaches of each coal mine amid disputes concerning rationalization, maintained its role as a counselling service for displaced workers as the labor union of each coal mine was defeated in mine closure disputes. The Aid Association therefore took the central role in measures for displaced workers in Hokkaido.

Moreover, it is also conceivable that behind the individual support provided to each displaced worker was consideration for their specific characteristics. Namely, those providing support were trying to handle the issues of the lack of social skills¹² of the displaced coal mine workers and their resulting difficulties in adapting to life in urban areas. An effective means of tackling these issues was to utilize the “fellow miners stick together” mentality that workers had developed in the severe and also at times dangerous working conditions in the coal mining community. As this suggests, it is possible to make the interpretation that the support systems provided principally by the Aid Association, which incorporated substantial individual support, were strongly in tune with the workers’ culture generated by coal mining communities.

Naturally, there are issues and limitations regarding the measures and support provided to displaced coal mine workers. The first issue is the problem of the hierarchy applied to eligibility for support. The displaced coal mine workers dealt with in this paper were the directly-employed coal mine workers, who made up the majority of the coal mining community. There were three different levels among coal mine workers: white-collar employees, miners, and day laborers (subcontractors). The conditions faced by day laborers, the lowest type of workers in the hierarchy, were incomparably poor in comparison with those of the directly-employed coal miners, and this also applied in the case of mine closures. Many day laborers were not eligible to be issued with a Black Notebook for the unemployment insurance system, and many were not eligible to receive pensions from the Coal Mining Pension Fund. Such workers did not receive the kinds of support described in this paper. From their point of view, the unemployment and poverty issues which had been noted in Kyushu before the enactment of the Act on Temporary Measures for Displaced Coal Mine Workers also went unresolved in Hokkaido in later years.

¹² More details on the sense of solidarity among and distinctive characteristics of Japanese coal mine workers can be found in Allen (1994).

Moreover, while white-collar employees had relatively favorable conditions while working for coal producers, when they were displaced following mine closures the new employment opportunities available to them were generally limited. In the case of *zaibatsu* conglomerates such employees were absorbed into group companies within the corporate group, but in other cases there were situations in which they were reemployed through hiring in packaged groups with former directly-employed coal miners.

The second issue was that, as shown earlier in this paper, support extended only up to the point at which workers entered reemployment or up to one year after their reemployment, and it was difficult to continue support until workers became settled after these points. Support to deal with workers who were later dismissed from their places of reemployment was insufficient. After the point at which support ended, it is difficult even to ascertain the situation regarding further losses of employment or stagnation among former displaced coal mine workers.

Finally, the third issue is that measures and support for displaced workers were generally those of the companies dismissing the workers, and the companies providing reemployment to such workers had not established frameworks for or stances toward such measures and support. It is not easy for displaced workers who have both changed industry and relocated to a new area to establish themselves in the community in their new area. Particularly those who migrated in large numbers due to being employed in groups, and started off living together in concentrated numbers in Employment Promotion Corporation housing before later spreading out in the community, were at risk of becoming isolated in their new community.

As demonstrated throughout this paper, the measures and support developed over the long course of restructuring in Japan's coal industry incorporated comprehensive and individual assistance. Naturally, it should be noted that such measures and support were achievable within the highly entrenched, collective bargaining-based frameworks of labor-management relationships under the company-centric social principles which were characteristic of Japan in the latter half of the twentieth century. In contemporary Japan, in which the flexibility and freedom of the labor market have developed and labor-management relationships have become more focused on individual relationships, measures and support such as those provided to displaced workers in the coal mining industry may even seem out of place. However, as we face a transition period for industrial structures, workers forced to change industry require not mere temporary patch-up unemployment measures but *comprehensive measures* offered over a reasonable period of time, and it is essential to provide support and placement assistance based on the circumstances of each individual. It is important to recognize the need for such measures and support and continue to develop them.

References

- Allen, Matthew. 1994. *Undermining the Japanese miracle: Work and conflict in a coalmining community*. Cambridge; New York: Cambridge University Press.
- Culter, Suzanne. 1999. *Managing decline: Japan's coal industry restructuring and community response*. Honolulu: University of Hawai'i Press.
- Employment Promotion Corporation. 1992a. *Koyo sokushin jigiyodan sanjunenshi* [History of 30 years of the Employment Promotion Corporation]. Tokyo: Employment Promotion Corporation.
- . 1992b. *Tanko rishokusha engo sodanin no tebiki* [Guidelines for counsellors providing support to displaced coal mine workers]. Tokyo: Employment Promotion Corporation.
- Employment Security Bureau, Ministry of Labour. 1971. *Tanko rishokusha taisaku junenshi* [Ten-year history of measures for displaced coal mine workers]. Tokyo: Nikkan Rodo Tsushinsha.
- Hama, Tamio. 2004. *Ikeshima Tanko rishokusha no shuro seikatsu jittai: Ikeshima Tanko rishokusha oyobi kazoku no shuro, seikatsu jittai ni kansuru chosha bunseki—heizan 2-nen o hete* [The Actual conditions of the working life of displaced workers from the Ikeshima Mine: Analysis of research on surveys of the working and living conditions of workers displaced from Ikeshima Mine and their families—two years after closure]. Working Environment Research Group, Faculty of Environmental Studies, Nagasaki University. <http://www.geocities.co.jp/hamatamio/page010.html>.
- Hokkaido Employment Aid Association for Displaced Coal Mine Workers, ed. 1978. *Engo kyokai 10-nen no ayumi* [Ten years of the Aid Association]. Sapporo: Hokkaido Employment Aid Association for Displaced Coal Mine Workers.
- , ed. 1988. *Ayumi: Engo kyokai no 20-nen* [A history: 20 years of the Aid Association]. Sapporo: Hokkaido Employment Aid Association for Displaced Coal Mine Workers.
- , ed. 2006. *Engo kyokai: 38-nen no ayumi—Kaisan resepushon* [Reception to mark the dissolution of the aid association: 38 years of the Aid Association]. Sapporo: Hokkaido Employment Aid Association for Displaced Coal Mine Workers.
- Ichihara, Hiroshi. 1997. *Tanko no rodo shakaishi: Nihon no dentoteki rodo, shakai chitsujō to kanri* [A social history of coal mine labor: Traditional labor in Japan—social order and management]. Tokyo: Taga Shuppan.
- Japan Association for Study of Former Coal Fields, ed. 2014. *Tanko rodo no genba to kyaria: Yubari tanden o chushin ni* [Work in the mine and miners' career: Focus on Yubari coalfield]. Tokyo: Japan Association for Study of Former Coal Fields.
- Kodama, Toshihiro. 2001. Mitsui, Miike Tanko no heizango no saishushoku jokyo ni miru rodosha no tenshoku kanosei [Using analysis of reemployment following the closure of the Mitsui Miike Mine to investigate the potential for workers to change career].

- RIETI Discussion Paper Series 01-J-004. The Research Institute of Economy, Trade and Industry, Tokyo.
- Oba, Yoshio. 2011. Kasajima Hajime “Hokutan rodo undo hyakunenshi no eiko to hisan” [Kasajima Hajime “History of development and strikes of labor movement in Hokkaido Coal-Mining and Shipping Co.”]. *The Journal of Development Policy Studies*, no. 88:221–80.
- Okuda, Haruo. 1992. Tanko rishokusha taisaku ni omou [Thoughts on measures for displaced coal mine workers]. In *Rotan: Gekito anohi anotoki* [The Japan Coal Miners Union: A fierce struggle on that day, at that time], Japan Coal Miners Union. Tokyo: Japan Coal Miners Union.
- Shakubetsu Labor Union, ed. 1970. *Dohyo: Sankyo no tomoshibi* [Milestones: Torches in the mountain valley]. Onbetsu: Shakubetsu Labor Union.
- Shimanishi, Tomoki. 2011. *Nihon sekitan sangyo no sengoshi: Shijo kozo henka to kigyo kodo* [A history of coal mining in postwar Japan: Market structure change and corporate activity]. Tokyo: Keio University Press.
- Shimazaki, Naoko. 2004. Tanko rishokusha no saishushoku kettei katei: Showa 46-nen Joban Tanko KK daiheizan ji no mikuro deta bunseki [Process to secured employment for displaced colliers: Microdata analysis of the Joban Colliery Co., Ltd., great mine closing in 1971]. *Journal of the Graduate School of Letters, Arts and Sciences of the Faculty of Letters, Arts and Sciences, Waseda University*, no. 49:43–56.
- . 2010. Community and workers in the face of coal industry decline. Paper prepared for the symposium “Collective Memories of Coal Mining in Japan and Wales” held at Waseda University on July 10, 2010.
- . 2011a. Regeneration in the Joban coalfield: The role of local government. Paper prepared for “Comparing Coalfields in Britain and Japan Symposium” held at Gregynog North Wales on March 10, 2011.
- . 2011b. History and regeneration of former coal mining community, JOBAN in Japan. Paper prepared for CTCC Conference, “On the Surface: The Heritage of Mines and Mining” held at Innsbruck University on April 16, 2011.
- . 2012. Santan chiiki kontekusuto to heizan rishokusha no saishushoku katei “Chikuho, Joban, Kushiro” [Coal mining area contexts and processes of reemployment for workers displaced by mine closures in Chikuho, Joban, and Kushiro]. Report of the 8th Japan Sociological Society Conference, held at Sapporo on November 3, 2012.
- . 2015. Posuto hachiji sekitan seisaku ni okeru heizan rishokusha no saishushoku katei: Mitsui Ashibetsu ni miru “shitsugyo naki saishushoku” [The final policy of the coalmining industry and miners’ re-employment: A microdata analysis of Mitsui Ashibetsu coalmine in Hokkaido, Japan]. *The Annuals of Sociology*, no. 56:93–110.
- Shimazaki, Naoko, and Naoko Sudo. 2013. “Saigo no yama” heizan rishokusha no saishushoku katei: Taiheiyo Tanko to Kushiro chiiki [Former coal miners and their

re-employment: Microdata analysis of “the last coal mine” in Kushiro, Japan]. *Annals of Regional and Community Studies*, no. 25: 109–25.

- Shirai, Chiaki. 2001. Shushoku taisaku honbu no taisaku to saishushoku no suii [Measures of the employment measures headquarters and trends in reemployment]. In *Tanko rodosha no heizan rishoku to kyaria no saikeisei: Kyu Joban Tanko KK koin no judan chosa kenkyu (Part III)* [Coal mine workers’ displacement due to mine closures and career rebuilding: Longitudinal study of coal miners of the former Joban Mine Company (Part III)], Kanji Masaoka, Sumiko Fujimi, Naoko Shimazaki, Keiichi Sawaguchi, Chiaki Shirai and Sawako Yano, 87–129. Tokyo: Advanced Research Center for Human Sciences, Waseda University.
- Smith, Donald W. 2005. Gender and ethnicity in Japan’s Chikuho coalfield. In *Towards a comparative history of coalfield societies*, ed. Stefan Berger, Andy Croll and Norman LaPorte, 204–18. Hampshire, England; Burlington, VT: Ashgate.
- Suganuma, Takashi. 1997. Tanko rishokusha taosali [Countermeasures of displaced colliers]. *The Monthly Journal of the Japan Institute of Labour* 39, no. 4:38–39.
- Takahashi, Shinichi, and Masamichi Takagawa. 1987. Sekitan kogyo no seisui to rishokusha taisaku: Chikuho, Kaijima Tanko no jirei kenkyu [The course of coal mining industry and the countermeasure of the unemployed miners: The case of Kaijima Coal Mining in the Chikuhou districts]. *Bukkyo Daigaku Shakaigaku Kenkyujo Kiyō*, no. 8: 81–109.
- Yoshimura, Sakuo. 1984. *Nihon tankosi shichu* [Individual comments on the history of Japanese coal mines]. Tokyo: Ochanomizu Shobo.