
論說

The Japanese Military Administration Department of Research Reports on Singapore's Wartime Economy

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Introduction

A photograph published by the *Illustrated London News* on 7 February 1942 shows the principal buildings and sites of Singapore. The Raffles Hotel is on the left and the Supreme Court on the right, with the harbour and sea in the background. It was taken from the top of the YMCA building near Fort Canning, and a week or so later everything shown in the photograph was occupied by the Japanese army. The Department of Research (*Chōsabū*) of the Southern Military Administration Superintendent General's Office (*Nanpō Gunsei Sōkanbu*), one of the research teams dispatched by the Japanese Government to Southeast Asia, used the Raffles Hotel, Supreme Court and Fort Canning during its members' stay in Singapore. The YMCA building was used by the Military Police. The *Chōsabū* was assigned to investigate the newly occupied Malaya and Singapore, and entrusted to supervise other research teams in Sumatra (Manchurian Railway Co.), Java (Institute for East Asian Affairs, Planning Board of Japan), North Borneo (Pacific Association) and the Philippines (Mitsubishi Economic Research Institute).¹ With a staff of 40, the *Chōsabū* became involved in both surveying and running the economy of Singapore and Malaya between the end of 1942 and the end of the Second

World War.

The wartime activities of the Chōsabu researchers in Singapore have attracted little academic attention in the past, with a limited number of articles and chapters written in English and Japanese on the subject. This small existing body of literature has given a general picture of the team's time in occupied Singapore and/or discussed in greater detail the involvement of the two prominent researchers – Itagaki Yoichi (1908–2003) and Akamatsu Kaname (1896–1974) – in political activities that led to their failed attempt to gain independence for the locals towards the end of the war.² No substantial work has been done to date, however, to investigate the socio-economic content of the research reports themselves; these were mostly handwritten and mimeographed amid the circumstances of occupation and economic collapse. This article thus provides the first in-depth analysis based on careful reading of the details of the Chōsabu reports, focusing on wartime economic matters. It reveals an alternative picture of the researchers' presence in Singapore that differs from the stories focused around the final few months of the war.

The Chōsabu members were mainly economists from the Institute of East Asian Economies at the Tokyo University of Commerce, which was the forerunner of the Institute of Economic Research at Hitotsubashi University, a Japanese equivalent to the London School of Economics and Political Science. When the researchers were first put up at the Raffles Hotel, they were thrilled by the music bands, the tropical fruits and the genteel colonial culture of Singapore. Although the propaganda of the military state denounced what it depicted as Western decadence, 'the Japanese in fact enjoy modern Western products, living like white men and conquerors in Malaya'.³ During their assignment in Malaya and Singapore, more than 60 reports were printed and circulated to be read by the Superintendent General himself and other high-

ranking officers and advisors to the Southern Military Administration. These included Marquis Tokugawa Yoshichika (1886–1976), a friend of Sultan Ibrahim I of Johor, fluent in Bahasa Melayu, who was also known to have struggled to save Singapore's Raffles Museum to become an academic core of the Southern Regions; and Shinozaki Mamoru (1908–1991), a Foreign Office attaché before the war, sometimes credited with producing a large number of permits for the Chinese residents of Singapore at the beginning of the occupation.⁴

The Chōsabu team was led by Akamatsu, a professor of economic policy at the Tokyo University of Commerce, who had been specially recruited to head the Institute of East Asian Economies in 1941. The flying geese pattern of economic development (in which less-developed economies catch up with more advanced ones) for which Akamatsu became well-known later in the 1960s,⁵ was first theorized in the 1930s as he observed the Japanese textile industry overtaking the British as the leader in world trade. For this continuity in his pre-war and post-war academic interests, we might expect to find a policy application of Akamatsu's trajectory also in the wartime reports on Singapore written by his team.⁶ An emphasis on a more practical industrial policy-making in the occupied areas, or even an attempt to build a developmentalist state in wartime Malaya and Singapore, might be expected from the reports. Curiously, however, this dimension of development economics was missing from the main body of the Chōsabu reports. Why was the catching-up theory not central to the work of his team and what else characterizes the unique collection of economic research reports in its absence?

This article first briefly discusses how the reports should be read and evaluated, considering the role played by the Chōsabu team in the Southern Military Administration. The second part puts the authors of the Chōsabu

reports in a wider academic context, focusing particularly on two junior economists, Yamada Isamu (1909–1986) and Higuchi Gorō (1906–1971), who produced more reports than Akamatsu or Itagaki. The third part traces how they came to be involved in carrying out various policies to ameliorate the adverse effects of the deepening war and the increasing military monopoly. The fourth and final part tells the afterstory of how the Chōsabu members returned to endure the psychological burden of cooperating with the Military Administration in post-war Japan.

The Tokyo University of Commerce was given the official offer to form a team of researchers as the Chōsabu on 30 June 1942. Its mission was laid out on 16 August by a Secret Order from the army, and its members were sent to Singapore in December, a year after the outbreak of war which they knew could never win.⁷ They were ordered to conduct research on how best to extract the natural resources essential to national defence, to ensure economic stability in the occupied areas and to give guidance to the various ethnic communities in the region. The reports were written broadly within these categories, but the individual research themes were chosen by the researchers themselves. The Chōsabu men recalled in their memoirs that they thought they were doing ‘research for research’s sake only’ and on that basis decided to collaborate with the army, but in reality during the occupation they became involved in actual policy implementation.⁸

They were given almost complete autonomy on what they could express through the reports – they were even free to give ‘verdicts’ or recommendations on the policies of the Military Administration.⁹ These were concisely summarized at the beginning of each report and gave recommended solutions to administrative problems, based on their conscientious, rational judgement. However, their verdicts were given on each element of policy at particular

stages of Japan's occupation, not on the final outcome of war economy: they had to halt their research, and produced no more reports in the final half year of occupation. The real 'verdicts' of the war economy may rather be found in Chin Kee Onn's frequently-cited *Malaya Upside Down*, published right after the war in 1946.¹⁰ The Chōsabu's and Chin's perceptions of the socio-economic problems resonate with each other on a number of themes. This article focuses on those socio-economic themes, such as the black market, inflation and rice rations, mimeographed between the spring of 1943 and the winter of 1944, which best characterize the roles of the Chōsabu researchers, ranging from mute collaborators to institutional dissenters in the Japanese Military Administration.

The Chōsabu Researchers' Reports

The 48 surviving reports written by the Chōsabu team cover a diverse range of topics. Those recruited to supplement the team of economists – including a bio-scientist, a medical doctor and researchers on religion and education – wrote on their preferred subjects. The political economists, such as Itagaki, developed ethno-political interests and translated reference materials on Muslim religious conventions.¹¹ Just over half of the reports (26 of the 48) focus on the economic themes of labour, mining and manufacturing, commerce, transport, money and finance. The depth of the arguments and complexity of the analyses indicate that food, commerce and money were priority themes, stemming from the problems caused by the war and the cessation of international trade – namely the ever-pressing interrelated issues of rationing, in-migration and inflation, which affected the everyday life of Singaporeans. Research and development relating to the manufacturing industry, especially on utilization of available resources in the Southern Regions, was not part of the Chōsabu's remit. The

Committee for Resource Utilization, established at the beginning of 1943 with representatives from the military and private businesses, discussed the possibility of industrialization using the primary commodities of the Southern Regions. From the Chōsabū, one representative was sent in as an observer.¹² The Chōsabū reports rarely discussed primary commodities, but allocated more space for discussion on distributive issues related to the ordinary Singaporeans as consumers and workers during of the Japanese occupation. Their reports reveal the progression of the Chōsabū researchers' thoughts, attitudes and actions during the course of the deepening adverse situation.

The reports span the two-year period from spring 1943 to winter 1944, which covers two rounds of a plan-action-evaluation cycle in the Japanese Military Administration in Singapore, starting around the time of the annual allocation of food rations at the beginning of the fiscal year in April. The researchers were initially not involved in planning, but in evaluating the policy outcomes. Many of the reports were submitted and mimeographed in the autumn months – 12 of the 26 reports from 1943, and 10 of the 22 reports from 1944 were dated September, October and November. Conferences for all the heads of research in the Southern Regions were also held in spring and autumn, which provided important occasions to set the overall research agenda and to showcase the Chōsabū team's research outcomes to the high officials of the Military Administration.

The Chōsabū was also responsible for coordination of surveys conducted by other departments of the Military Administration and the Syonan Municipality. Team members also instructed departments and research offices in other parts of the Southern Regions to produce reports on the state of economy and industry at the beginning of 1943, particularly before they settled down to start their own research. The Chōsabū researchers strongly emphasized at the beginning of

their assignment the importance of using standard research methods for surveys for all the southern research teams and offices, probably having been struck by the lack of empiricism and the arbitrariness in the format of reports written by the other offices in Singapore.¹³ Not all research bodies eagerly followed the empirical research methods recommended by the Tokyo University of Commerce academics, but some did provide raw data on price and population for the Chōsabu researchers. They were then able to compile and analyse this and give their own verdicts on the war economy, based on a critical reading of the data.¹⁴

The third part of this article begins with an examination of the contents of the reports written not by the Chōsabu but by the Departments of Police Administration and General Affairs in Spring 1943;¹⁵ then moves on to discuss the survey reports written in response by the Chōsabu in Autumn 1943;¹⁶ the Chōsabu's renewed policy recommendations made in Spring 1944;¹⁷ and finally the action reports put together by the Chōsabu in Autumn 1944.¹⁸ These are spread over the two annual plan-action-evaluation cycles. A comparison of the contents and the rhetoric, both overt and hidden, reveals both the progression of the researchers' thoughts and convictions and how this affected their own actions over the course of time. However, before venturing on to the detailed deciphering of the reports themselves, let us first investigate what the Chōsabu researchers meant by 'standardized' methods, and what their visions were before and after their arrival in Singapore, that may be revealed by learning the background of their academic training in Japan.

The Chōsabu Team

The idea of sending a group of researchers to the south started at the Tokyo University of Commerce with the President Ueda Teijirō's (1879–1940) trip to China in 1939 before the outbreak of the war in the Pacific.¹⁹ His tour around the colonized cities of Asia – including Seoul, Dalian and Beijing – was sponsored by Kagami Kenkichi (1869–1939), the president of Tokyo Fire and Marine Insurance Co., an internationally known businessman once on the cover of TIME magazine. Both Ueda and Kagami were proponents of the free trade movement in the inter-war period. Ueda was a student of Fukuda Tokuzō (1874–1930), who despite never holding the post of president of the Tokyo University of Commerce is considered the most influential figure in the University's history, promoting it from a former commercial school to a university. Fukuda was influenced by Lujo Brentano during his time studying in Munich between 1898 and 1900,²⁰ and used Marshall's *Principles of Economics* (for which Brentano wrote the introduction to the German translation) as a textbook for the first time in Japan, having had it translated by his student Ōtsuka Kinnosuke (1892–1977). Ōtsuka later became the central character responsible for reforming the Institute of East Asian Economies after the Second World War. Akamatsu, Nakayama Ichirō (1898–1980) – known as the Japanese Schumpeter – and Sugimoto Eiichi (1901–1952) were also students of Fukuda, and represented the diverse range of subject matters in economics studied and taught in Japanese universities.

Ueda, the founder of the Institute of East Asian Economies, had studied in England, where he was initially influenced by William Ashley, the founder of the Faculty of Commerce at the University of Birmingham, but then moved to Manchester to attend lectures by Sydney Chapman, who had written *Lancashire*

Cotton Industry.²¹ Ueda also toured around Germany and the US, visiting Wall Street and Harvard Business School before returning to Japan.²² A few decades later Akamatsu, who had learned case study methodology at Harvard Business School, was invited by Ueda to lead the Institute from October 1941.²³ At the other end of the ideological spectrum was Ōtsuka, who had studied at the University of Berlin under the supervision of Werner Sombart. By the outbreak of the war he was no longer at the Tokyo University of Commerce, having been arrested by the Special Higher Police in 1933 for writing a chapter of the *History of the Development of Capitalism in Japan*.²⁴ Succeeding to Ōtsuka's teaching position in the socialist-leaning principles of economics – in parallel to Nakayama's lecture course on the principles of modern economics – was Sugimoto, who had just returned from Germany via America. He had studied at the Institute for the World Economy (*Institut für Weltwirtschaft*) at the University of Kiel, where he became acquainted with Wassily Leontief. An expert on quantitative economics, Sugimoto briefly joined the Chōsabu for half a year and laid the foundations for the standardized empirical survey methods. He was critical of the future of Japanese militarism, and was reported as saying to the rest of the Chōsabu team on his departure from Singapore that 'the war will be lost and you will be captured'.

The generation of junior researchers of the Chōsabu did not have the privilege of studying abroad like their seniors but were influenced by the disciples of Fukuda Tokuzō, including Ueda, Akamatsu, Ōtsuka, Nakayama and Sugimoto. Before and during the war, Sugimoto focused on introducing methods to estimate demand and supply of rice using statistical data collected by the Ministry of Agriculture, and was also involved in setting up a survey of household expenditure at the Cabinet Statistical Office, employing Yamada Isamu for the actual data work.²⁵ Yamada was educated at the Nagoya

Commercial School and worked at the Industrial Physics Laboratory before moving to Yokohama Commercial School, where he was discovered by Nakayama and invited to join the Institute of East Asian Economies.²⁶ Yamada's main research focus was statistics and standards of living. Before coming to Singapore, he had produced a series of agricultural production indices for Japan, Taiwan and Korea, which were published as the first – and the last, because of the war – monograph of the Institute.²⁷ Yamada's research showed that, unlike Japan and Taiwan where an increase in rice production led to a reduction in other grain crops, Korea saw a parallel increase in production of both rice and other grains.²⁸ This is evidence of the harsh reality of Korea's rice exports to Japan, which left the locals to survive on other grains, despite rice being a staple of the Korean diet. Yamada was the kind of empirical researcher who quietly gathered hard evidence to present as criticism of the military state. He was sent by Sugimoto to work on the household expenditure survey while still in Japan in 1941, and he was particularly concerned with the lowest levels of living among labourers and peasants.²⁹

Unlike other junior researchers, Yamada refused to take up the position of 'civil administrator' of the army but insisted on joining the Chōsabu team as an academic researcher. While others received increased earnings and a special promotion of two ranks, Yamada did not receive a promotional payment for becoming an army officer, but was instead promoted nominally within the University to the post of assistant professor when he left for Singapore.³⁰ Itagaki did not double as a civil administrator, either, having been an assistant professor for a year, teaching 'colonial policy' at the time of his departure.³¹ His early wartime experience was quite different from the rest of the younger scholars, having been privately funded to travel to Indonesia and give public talks on colonialism before setting off for Singapore.³²

Higuchi Gorō is one of those Chōsabu junior staff who became civil administrators and about whom not much is known. He was probably a disciple of Yamaguchi Shigeru (1893–1974): after the war they co-authored a monograph on inflation in Japan.³³ Yamaguchi, the most established of the business scholars of accounting and banking at the Tokyo University of Commerce, was a student of the first president of the University, Sano Zensaku (1873–1952), whose academic inclination derived from the tradition of the former commercial school. Sano was the headmaster of the commercial school when he was endorsed by the Western-educated Fukuda to be the first president of the University, which Fukuda struggled to establish. The fourth president, Takase Sōtarō (1892–1966), also derived from Sano’s group of scholars, and sent Yamaguchi to investigate the extremely high inflation in Shanghai, while sending the rest of the Institute to Singapore. Both Yamaguchi and Higuchi argued that inflation in Shanghai, and to a lesser extent in Singapore, was the result not of an issue of excess currency but of a growing demand for material goods. Although the increased issue of military scrip was a fundamental cause of price increases, Yamaguchi and Higuchi were not overtly critical of the printing of money, focusing more on the fact that wartime inflation was exacerbated by acute shortages of goods.

Before travelling to the south, Higuchi did not write for the annual report for the Institute of East Asian Economies as the senior Chōsabu members did,³⁴ nor did he produce a monograph like Yamada’s,³⁵ but he did give an oral presentation at an in-house weekly seminar on 20 July 1942 on the topic of ‘financing the Co-prosperity Sphere’.³⁶ The Tokyo University of Commerce had started responding to the call for cooperation in nationalists’ effort and tilted towards the eventual war in 1940 and 1941 by setting up the Institute in April and sending students to Shanghai as the ‘Building Asia’ Student Voluntary

Work Force in August 1941. After 8 December 1941, with the outbreak of war, the University and the Institute offered their services to the army section of the Imperial Headquarters through the brother of Takase, the then president of the University, who worked in the Department of General Staff.³⁷ The weekly seminar at which Higuchi and other members of the Institute presented their preparatory research began in April 1942, with Akamatsu presenting first on ‘the pattern of industrial development in the developing countries’, followed by Yamada – in second place – on ‘measurement of economic self-sufficiency’. Yamaguchi presented on ‘Asian characters in currency’ in May and Sugimoto on ‘the heterogeneous character of the East Asian economy’ in June, followed by junior scholars like Higuchi.³⁸ These topics demonstrate their specific research interests, but notably the topic of colonial ethnic policy that Itagaki had been propagating elsewhere, such as at Dai Nippon Colonial Studies, was missing on these occasions.³⁹ On 17 August 1942, Akamatsu gave a talk on ‘building Great East Asia’, right after receiving the Chōsabu research plan as a Secret Order from the army. From surviving records, it is not possible to know how far Akamatsu discussed the plan with the staff members. Nevertheless, it is significant that the Chōsabu research reports produced later in Singapore never repeated the phrase ‘building Asia’.

Spring 1943: Setting the Scene

In February 1943, a month or so after the Chōsabu’s journey to the south, a meeting for all heads of research in the Southern Regions was held in Singapore. ‘Research on minimum standards of living’ and ‘research on how to set up a trade and finance system in the Co-prosperity Sphere’ became the two top priorities for all the research teams attached to each regional military

administration.⁴⁰ In other words, having arrived in Singapore, the Chōsabū was more interested in restoring the order of former British free trade imperialism than in developing a new Asia under a socio-economic plan to give a big push through industrialization of the occupied areas. This interest did not contradict the Imperial Army Headquarters' new emphasis on establishing a framework to fight the 'decisive war' till the end, turning away from the initial optimistic vision of 'building Asia' through the Co-prosperity Sphere. Although not directly related to a free trade framework per se, the new emphasis of the Military Administration was placed more upon 'winning the hearts and minds' of the people, which in effect meant giving more economic autonomy to the collaborative local traders. A guideline handout prepared by the Tokyo University of Commerce academics was not, however, well received by the other commercial and/or governmental research teams. Individual teams each ended up working on their own accounts in different parts of Southeast Asia.

As noted earlier, Akamatsu, an expert on patterns of industrialization, did not author any reports himself, and the Chōsabū did not leave any substantial research results on the issues of industrialization. However, the report prepared by the Research Office of the Southern Military Administration Department of General Affairs, which was probably in charge of research activities before the arrival of the Tokyo University of Commerce researchers, gives information about the state of the industrial sector in Singapore at the beginning of 1943. Written as reference material for the Committee for Resource Utilization, the Research Office's report entitled *Important Industrial Factories in Syonan Municipality*⁴¹ gives details of two dozen or so factories in Singapore, ranging from an electric power plant to an opium factory. A detailed description of these factories, including their organization and how the state-of-the-art machinery confiscated from the enemy companies worked, is provided in this brief report.

Almost all were owned by British or foreign capital before the war, and were transferred to Japanese management except the wine and soap factories: 'soap production was one of those lucrative ventures' set up by the locals.⁴²

What is characteristic of this report is the overtly optimistic account of industrial capacity. In Malaya, fibre resources, for example, were in short supply. While they tried to plant cotton trees (kapok trees), sisal hemp, Manila hemp and other plants suitable for producing fibre, the Japanese also began to experiment with pineapple fibres, which were collected manually from pineapple leaves, as *Important Industrial Factories* reveals. In May 1943, hand spinning of pineapple fibre became possible using small wooden spinning wheels. The report offers a calculation of pineapple fibre output: '2g of fibre can be made from a pineapple leaf [...] Daily production per female worker is 4–5 ounces. At present daily production of pineapple fibre is 12–13 pounds, and over the whole peninsula it is possible to produce 2,000 tons.'⁴³ Raising yearly production to this level would require at least 36,000 female workers and approximately 250,000 pineapples a day. This rather over-optimistic macro-level output calculation echoes the 18,000,000 square yard target output set for Malaya for 1943 in the *Five-Year Plan of Local Self-sufficient Economy*, requiring a few thousand tons or more of fibre, depending on the thickness of the textiles. This is one example of the barely feasible less-than-five-year plan laid out by the Southern Military Administration in September 1943 for 1943–1946.⁴⁴

A similar kind of excessive optimism about the planned economy is evident in another report produced by the Department of Police Administration in spring 1943, entitled *Conditions of Economic Security in Syonan Municipality and Johore*. At the basic level of Singaporean life, bare-bone subsistence was narrowly achieved, as the former department administrators recalled after the

war, because Syonan Municipality placed priority on ensuring that rationing was ‘efficient and effective’.⁴⁵ That was achieved by adjusting the number of traders given permits to trade in controlled goods, at the discretion of the administrators. Taking rice as an example, rice rationing was initially operated through 50 wholesale dealers and 1,971 retailers in Syonan Municipality in March 1943. The author of *Conditions of Economic Security* notes, with an overtly hostile presumption towards the local traders, that: ‘there were 548 small-scale retailers who only deal in 1–15 sacks of rice per month. Because the handling charge is set so low per sack of rice, it is not surprising that misconduct occurs’.⁴⁶ The number of rice distribution stations was subsequently reduced to 1,007 retailers by March 1944.

Proper control of the rationing system was seen as the most crucial policy in stabilizing the economy and gaining approval from the local people under Japanese occupation. ‘Rice was the fulcrum upon which inflation and cost of living see-sawed.’⁴⁷ The Food Division of the Department of Industry, which adhered to the rules of the former British Administration, and the Department of Police Administration, which took a more robust approach, were together instrumental in overseeing the whole rationing operation. Later, as seen with tapioca bread and tapioca noodle rationing, the influence of the Department of Police Administration extended through the Auxiliary Police Assistants Organization. This was set up by local leaders, collaborating with the Japanese, who were appointed as Auxiliary Police Assistants to supervise local affairs. 196,082 households (as of June 1944) were gathered into 5,101 teams with 30–40 households per team.⁴⁸ The Auxiliary Police Assistants issued census cards for the population in each team, organized night watches and promoted general peace and welfare, including the administration of rationing.⁴⁹ The recommendations laid out in *Conditions of Economic Security*, which included

reduced rations for rural residents, reduced numbers of ration stations and unification of policing power into the Department of Police Administration, came to be implemented over the course of 1943/44.

The Chōsabu did work alongside the Department of Police Administration – for example, they used the census card records collected by the Police Assistants in their analyses and reports – but they also tried to correct incorrect assumptions made by the police administrators whenever possible in their subsequent reports. While the Chōsabu researchers did not collaborate in resource utilization in the industry sector, they did try to expand their influence over the rationing operations because researchers like Yamada were concerned about the lives of the local people and because issues of inflation and cost of living were their areas of expertise.

Autumn 1943: the Chōsabu's Initial Response

Standard of living

On 11–12 October, the Heads of Research Conference was held in Singapore, for which the Chōsabu members prepared a number of reports. The report entitled *The Lowest Level of Living* is particularly notable among those published in autumn 1943, as it was a direct response to the research priority set by the Chōsabu in February 1943. It also corrected the impression wrongly created by a comment of an administrative officer of the Department of Police Administration on his visit to Teregannu, as cited in *Conditions of Economic Security*: ‘it is incorrect to consider the entire Malayan population as rice eaters; at present many of the lower classes do not eat rice’. This official assumed that: ‘they keep back the rationed rice and sell it on the black market’.⁵⁰ In response to this, however, Yamada, the principal author of *The Lowest Level of*

Living, clearly stated that: ‘the main food of Malays is white rice’.⁵¹ Intending to provide accurate information on necessary consumption items for the subsequent full-scale household expenditure survey, he also emphasized that the same was true for the Chinese and Indians and that everybody was entitled to a ‘fair’ share of essential rice rations.

Chin in his verdict bitterly remarks: ‘The rice-consuming populace of Malaya revealed too openly that they could not live without rice, and the Japanese made full use of that fact.’⁵² The lure of special rice allocations to labourers, which often disrupted the ‘fair’ distribution, concerned Yamada’s co-author, who cited the request made for an increase in white rice rations, while noting that a coolie who received 14 catties (8.4kg) of rice and meals at the workplace still considered the ration ‘insufficient’. Surveying the people at the lowest level of living, Yamada – who took over again from the second author when writing the conclusion – tried hard to present an accurate judgement. At the time of the survey in April–July 1943, the level of rations and the state of the economy were still showing a relatively stable outlook. Nominal wages had risen for most of the surveyed households, compared to pre-war conditions, except for Chinese rubber company coolies and Indian and Malay rubber plantation coolies. Yamada was eager to include them as respondent households in their survey of lowest living, being particularly sympathetic to the plight of plantation workers after the cessation of rubber export. The rising nominal income in other sectors could be the outcome of and the cause of slowly rising prices at that time; already in the first half of 1943 the repercussions of high prices were felt, for example, by the Indians who struggled to obtain imported spices.

Population by occupation

Another response from the Chōsabu researchers to the work done by the Department of Police Administration can be seen in their use of census cards as a data source for their analysis in *Syonan Municipality Population by Occupation*.⁵³ On the face of it, this report only provides descriptive statistics, showing the number of people in each occupational category, broad and narrow, by ethnic group and by gender. However, reading between the lines and from inserted sentences on a piece of paper stuck over one page, it is clear that the Chōsabu members became worried about the outcome of their analysis if it were used against groups of people such as the Chinese in commercial occupations. By the time of the publication of this report in December 1943, plans to utilize the underused and unused workforce in important industries had been drawn up and the Syonan Municipality had started dispatching groups of Chinese migrants to Endau Settlement in November.⁵⁴ The inserted note in *Syonan Municipality Population by Occupation* tries to explain why population numbers in other occupations apart from commerce might be underestimated, stating: ‘consequently, adding these numbers and merging the numerous coolies with those in mining and manufacturing reduces the share of commerce in the employed population’. This insertion was probably made to lessen the impact of the comment below it on the likelihood of an excessive number of people in commerce: ‘in view of the present state of mining and manufacturing in Syonan Municipality, it is not per se unlikely that there are an excessive number of people in commerce’.⁵⁵ The Chōsabu authors were worried and were careful not to overemphasize the figure.

At the end of 1943, the Chōsabu researchers were not yet of one opinion. Some like Yamada, who had a stronger conviction from the beginning, were not afraid of appearing overtly critical; others stayed quieter and were more

careful. But in 1944, for the second round of plan-action-evaluation cycle, more reports came to be written with fewer apparent inconsistencies among them. The October 1943 Heads of Research Conference, followed by the Conference of Science Institutions, outwardly propagated their academic achievement, receiving newspaper coverage in Tokyo, while inwardly consolidating the more liberal faction within the Military Administration. One reason the idea of ‘building Asia’ was retracted by the Chōsabu is revealed in the closing speech by Lieutenant General Takahashi Tan, Director of the General Affairs Department, on 12 October. He not only mentioned the difficult war situation from Burma to New Guinea, urging the heads of research to prepare for a decisive war, but also openly denounced the idea of building the East Asian Co-prosperity Sphere that was propagated at the beginning of the war. He then emphasized the importance of more basic-level academic research, i.e. research on fauna and flora of the tropics and ethno-cultural lifestyles, over practical short-termism, such as those seen in the ‘new industries’ of wartime substitutes. This might well mean that Takahashi was sympathetic to the view of Marquis Tokugawa who admitted the collapse of economy.⁵⁶

Spring 1944: Countermeasures by the Chōsabu

In January 1944, in a comprehensive redeployment of army force allocation in the Southern Regions, the Malayan Military Administration came to be located in Kuala Lumpur, where the Chōsabu’s office also transferred. The Malayan Military Administration had Lieutenant General Hamada Hiroshi as Director of General Affairs Department; he realized that the Chōsabu might be useful and allowed its role to expand. It now not only wrote descriptive research reports but was also involved in actual implementation of policy

administration.⁵⁷ Singapore continued to accommodate the Southern Army with Lieutenant General Takahashi in the General Staff's Office, and was governed more or less autonomously by Syonan Municipality, which had local staff from the previous British Administration, including a few British engineers and Japanese staff who knew the pre-war Singapore, and including Shinozaki Mamoru, who now served as Director of the Department of Welfare. When the Chōsabu left for the Peninsular, Yamada and his team of local statistics assistants were left behind under Shinozaki's direction.⁵⁸

By the end of the fiscal year 1943/44, when the Chōsabu's planning recommendation for the coming year was written, the situation of food imports worsened. Japanese defeat at the Battle of Imphal terminated the rice import from Burma, which Singapore had relied upon since before the Japanese occupation. The report's title was *Countermeasures on price, especially in Syonan Municipality*, and it described the measures to tackle the five-fold increase in prices seen over the previous year.⁵⁹ The content and format of the report resemble *Conditions of Economic Security*, but the 1943 report only covered rice, salt and sugar as control goods, while the 1944 version explained the state of control and rationing for rice, vegetables, fruit, meat and fish. The report's argument centred on how the revised level of rations, which was imposed in February 1944, could not sustain a minimum standard of living for the people in Singapore.⁶⁰ Reduced rations meant that for an adult male general monthly rice rations were 8 catties (160g, 544 kcal daily), supplementary food rations 4 catties (80g, 273 kcal of mainly tapioca and sweet potatoes) and vegetables 3 catties (36 kcal), which at 905 kcal amounted to well below a life-sustaining level. People resorted to the uncontrolled market to supplement their diets. Those who worked in essential factories or in the ports received a further 180g of special rations (612 kcal), making the total 1517 kcal.

The Chōsabu's report recommended a higher level of rations to allow a minimum standard of living: for an adult male rice rations of 12 catties (240g, 816 kcal daily), supplementary food rations 8 catties (160g, 547 kcal), vegetables 4.5 catties (90g, 54 kcal) and fish and meat 2.6 catties (52g, 52 kcal). In total, the daily calorific intake for adult male just on general rations should be at least 1469 kcal.⁶¹ It then laid out a set of policy recommendations to tackle the problem of food shortages, which in turn were regarded as effective countermeasures for higher prices through increasing food production, streamlining freight collection, prioritizing rations, encouraging out-migration and increasing both controlled and uncontrolled imports of rice by the local traders. What the Chōsabu researchers recommended in March 1944 became what they actually helped implementing during the following months. Their activity provided the basis of the subsequent research reports published in September and October 1944, which put forward the requirement to crack down on harmful practices of military monopoly and to respect local businesspeople in order to secure enough food for a population of close to a million, including numerous prisoners of war and captured foreign civilians on Singapore Island. The prisoners of war were then given 460g rice rations for heavy-duty work until 9 March 1945.⁶² This was just a little more than the recommended level of 420g rations for the locals on heavy duty.⁶³

Autumn 1944: the Chōsabu's Policy Implementation

Asking overseas Chinese businesses for help

After the transfer of the northern rice-producing region of Kedah to Thailand, restrictions on retail rice prices were lifted, and the market price of rice rose in October 1943. This situation became of major concern to the

Military Administration when severe flooding in Kedah in November, and conversion of rice paddies into experimental fields for agro-industry (for fibre and munitions), followed by less than usual rainfall in spring 1944, added to the existing scarcity of rice, putting further upward pressure on prices.⁶⁴ There was a sharp increase in the Japanese Government dollars sent to Alor Setar, Kedah, which led to the sudden announcement of the prohibition of unregulated rice imports on 20 March 1944. Mitsubishi and other Japanese trading companies were sent in to monopolize the collection of rice, but as their purchasing price was too low, they could not prevent the Alor Setar black market price from shooting up even further.

Scarcity of Kedah rice and a reduction in general rations from February 1944 onwards led to public discontent, which the Director of General Affairs, Hamada, took seriously and allowed the Chōsabu and Syonan Municipality to improvise a policy to allow direct import of rice from Bangkok by the overseas Chinese businesses in Singapore. A preparatory committee for Syonan Rice Import Association was inaugurated on 13 April, and the Padi Dealings Enactment, published on 3 May 1944, allowed Chinese businesses to deal directly with the rice mills.⁶⁵ In Singapore, the Syonan Rice Import Association was established on 16 May by Tan Ken Koh of Tan Guan Lee Co. and other prominent Chinese leaders. In Penang, the young Chinese leaders of the *Eppōsho* (reading room),⁶⁶ having opened by the Chōsabu on 4 June, created the Penang Rice Import Public Bureau on 20 June 1944. The problem was that Nami Kikan, the army's secret intelligence agency also declared on 16 May their involvement in rice imports via the east coast Singgora route.⁶⁷ Nami Kikan entered the Padi dealings in order to give work to the junk boat owners in return for their loyalty to the secret agency. The junk boats had been anchored in the nearby islands after the prohibition of unregulated imports on

20 March, and were susceptible to being used by the Allied commandos. The Chōsabu report *Rice Imports in Malaya, especially in Syonan Municipality*⁶⁸ elaborates on how Nami Kikan's activities impeded the initiative of the Chinese businesses leaders of Syonan Rice Import Association, and on how they managed to persuade the Nami Kikan to suspend selling rice in the city on August 6. From 17 August, rice imported by private traders appointed by the Syonan Rice Import Association and the Penang Rice Import Public Office also supplied other states.

Importing rice through Alor Setar between the end of June and the end of August 1944, Penang Rice Import Bureau imported more than 60,000 picul (3,600 tons) of uncontrolled rice. While much of the imported rice at that time also came via Sumatra and Saigon by Mitsubishi-run cargo ships, in about four months by the mid-October 1944, Syonan Rice Import Association managed to import 123,461 picul (7,470 tons) which together with the seized cargoes from Nami Kikan amounted to 221,672 picul (13,411 tons).⁶⁹ It is hard to judge how effective these rice import operations were, but one ex-Chōsabu member stated that it required constant hard work for him and his team to gain economic cooperation from the overseas Chinese on a level which, in the end, was capable of mobilizing large quantities of food, labour and even sufficient money to build an airport.⁷⁰ Having generated a flurry of activity, the Military Administration gave a formal approval of 'controlled' private import in October 1944, just when the Chōsabu report on rice imports was published, reporting on all this activity.⁷¹ At the end of the war, as of 31 August 1945, the Syonan Municipality stock of rice was a little more than the one-month reserve at 5,641 tons, more than a third of which comprised private importers' rice.⁷²

Inflation as a reflection of material shortage

From May to August 1944 Singapore's food price index more or less stabilized, possibly due to the increased supply of rice brought in by the Syonan Import Association and others. Among the Chōsabu researchers, it was Higuchi who worked on the problem of high prices.⁷³ He was sent to set up the Monetary Forum in Kuala Kangsar and Kuala Lumpur from 30 May.⁷⁴ As described in the report *Conditions of Economic Security* prepared by the Police Administration Department, inconsistent rules to control prices and a lack of cooperation among the departments of the Municipality and Military Administration were creating an economic hazard that required a comprehensive and cooperative solution. Higuchi already felt helpless in face of the pressure of high prices, despite his tougher line of argument in his earlier report on *Withdrawal of Local Currency*. He concluded in a short article in the *Chōsabu News* that 'all countries at war are facing the same problem' and that they could do no more apart from following the standard measures of tightening rationing and price controls and absorbing any excess currency in circulation.⁷⁵

The extent to which tight rationing, combined with the effort to increase food supplies, was effective in stabilizing price increases can be checked by the data on Syonan retail prices collected by the Chōsabu from April 1943 to January 1945 or later.⁷⁶ Here it should be noted that the three components of the food price index – the ration prices, controlled prices and black market prices – were simply averaged and not properly weighted.⁷⁷ The concept of a 'shopping basket' was not yet employed. Soaring black market prices affected the daily lives of the Singaporeans, who required more food than was allowed in rations, but they may have affected the expensive Japanese restaurants as much as the locals. In March 1944, new official prices for fresh fish and salted fish were set 11 times higher than the pre-war prices. Higuchi wrote that fish

prices tend to rise fast because the Japanese restaurants were willing to pay so much for high-quality fish. The same was true of meat. In response to this situation, the Military Administration introduced the experiment of abolishing official prices in May 1944 in order to lower the market price of fish, meat and vegetables, in response to the request by the leaders of overseas Chinese businesses who strongly opposed against the 'Associationism' introduced by the Japanese Administration.⁷⁸ 'As soon as an Association (*Kumiai*) for any particular commodity was founded, the commodity soon disappeared from the market'.⁷⁹ The flattening of the price index from April to July 1944 may partly have resulted from this reversal measure.

Higuchi anticipated, however, that the abolition of official prices would 'only have a temporary effect'. As he pointed out in his report, it was not only the scarcity of food and raw materials that was driving up prices but also military defeats, which lowered the credibility of Japanese military scrip.⁸⁰ The prices of perishable foods in the peninsula were also rising fast as the purchasing power of Singapore affected the producing areas. Higuchi seems to have been in two minds about the situation in Malacca and Kuala Lumpur. On one hand, he thought that removing all the restrictions on vegetables, fish and meat was inevitable, but on the other he was worried that 'star-marked automobiles of the military units and their appointed agents come from the south to smuggle pork and vegetables out of the state without permission from the state council'.⁸¹ The state council in Malacca abolished official prices, following Singapore, but Selangor State introduced two levels of prices for perishables to prevent them from disappearing from the state's official channels. Higuchi endorsed this halfway solution, which, in response to the needs of the Japanese (and the locals employed by the state) whose wages were pegged to the value of military scrip, secured meat, fish and vegetables at official prices (implying a combination of

contract delivery and licensing). This, he believed, also provided incentives to producers and eased the inflow of perishable foods into the city, in order to allow ordinary citizens ‘whose incomes were not fixed’ to get access to the available food at unrestricted prices.⁸²

Managing the population in commerce and industry

Apart from his work on money, Higuchi authored a report entitled *Reorganizing Commercial Businesses in Syonan Municipality*.⁸³ This report led on from *Syonan Municipality Population by Occupation*, which counted the number of people working in commercial businesses, although the Chōsabu authors were careful not to exaggerate the share of commercial population in the total population. Higuchi and his colleague were now given the task of choosing which businesses to close down, and by doing so they stepped in to prevent the Military Administration from choosing these at random. Many pages and tables in this report are allocated to the ‘resilience test’ of commercial businesses, based on the number of years in business and the amount of capital. The report avoids giving one single recommendation but leaves multiple simulations as the result of the resilience test, so that the final decision was not made by the authors themselves. Families in commercial businesses were expected to migrate outside Singapore to the new settlement in Endau, Johor, which was self-governed by the Overseas Chinese Association.⁸⁴ Employees of commercial businesses were expected to become wage-earning industrial workers, for many factories run by Japanese companies suffered from a lack of workers and a high labour turnover rate. Three months later the ‘Restriction of Male Employment Ordinance’ was passed in order to bolster recruitment into the farming settlements and factories.⁸⁵

The only report the Chōsabu itself produced on the topic of industrial

factories was concerned with the working conditions in the factories. The author of the report observed that workers at factories run by local business people were much happier and did not tend to quit their jobs so readily. *A Study of the Labour Situation in Syonan Municipality* recommends that Japanese factories focus on retaining the existing workforce by giving them better pay in kind – particularly rice and tobacco – more holidays, better transport to work and better welfare facilities such as in-house clinics. The style of writing is remarkably different from *Important Industrial Factories in Syonan Municipality*, written by the Department of General Affairs over a year earlier, in which optimistic calculations for increasing output in the future had been made. The Chōsabu's take on factories was far more cautious and expressed reservations about the suggestion of recruiting young female workers, which the Military Administration was pressing for. The author stressed that 'in view of the intellectual level, physical strength, ethnic divisions and religious barriers of local women, in addition to the population composition of Syonan Municipality (the female population is 70% that of the male), female labour force ratios are to some extent as high as they can be'.⁸⁶ Although the civilian-run Japanese factories were reservedly recommended to change their traditional ways and start taking in more women, they were also urged to improve working conditions to prevent their workers from moving to the military sector, which paid much higher wages. They recommended that a centralized department for labour management for both civilian and military sectors should be created in order to stop competition for new recruits. They also urged the setting up of an institution to give educational guidance, training and labour exchange services for the local people.

Demand and supply of food

The struggle against the economic monopoly of the military sector was the most pressing concern for Yamada, who was preoccupied by the issue of food allocation in Singapore. The Syonan Municipality staff did everything in their power to keep food supplies for local Singaporeans at least at subsistence level. In the difficult situation towards the end of the war, the Japanese staff of Singapore even went about purchasing meat and vegetables directly from the producers in other states so as not to be outdone by the military units.⁸⁷ Much of their effort, however, went into cultivating and processing tapioca, which, with a shorter growing period, could provide a more immediate bulk solution for food shortages than rice. Sweet potatoes and tapioca were rationed in the raw, or as processed food, cooked, dried and pounded into powder because of their tendency to rot in the heat. There were 18 tapioca bread factories; bread was rationed through 1007 ration stations at one loaf per day for a household of three people and two loaves or more for larger families. The bread tasted just 'like rubber' or 'like our eraser', according to a Singapore resident.⁸⁸ There were also 29 tapioca noodle factories, whose products were rationed by Auxiliary Police Assistants and their sub-organizations, at 600g per family every three days.⁸⁹

Foreseeing the possibility of total cessation of food imports in the event of the Allied landing, it became apparent that the level of local food production required was much higher and the acreage of land required for cultivation thus much larger.⁹⁰ Yamada was set the task of calculating how much. The most significant aspect of his writing in *Methods of Increasing Food Production on Syonan Island* was his strong recommendation that farmland under military management should be transferred to Syonan Municipality for civilian use.⁹¹ Yamada saw that many military-managed farms were inefficient and

unproductive owing to a lack of fertilizers and bad subcontracting agents, who treated the locals in such a way that they were left with no incentive or strength to work. He recommended that of the existing 7,000 acres of military farmland, 3,000 should be transferred to civilian use and a further 7,740 acres should be newly cultivated. To cultivate all this additional land, 6,130 farming families, comprising at least 18,390 able workers, were required. It was estimated that this land could produce tapioca at the rate of 2.5 tons and vegetables at the rate of 6 tons per acre per year, yielding 90g of tapioca and 96g of vegetables per person per day for 850,000 people in Singapore. Yamada concluded that this would allow 66.7% more carbohydrates and 45.5% more protein than the level achieved in autumn 1944 when the report was written.

It is difficult to know whether Yamada's assumptions about potential production levels were realistic or whether he was making an over-optimistic estimate. He used the average productivity levels of the selected military farms as the basis for his calculation of civilian tapioca production. These were comparable to the reliable productivity level figures for Syonan farmers surveyed by his younger colleagues. These two colleagues stated that for professional farmers, average annual productivity levels for tapioca and vegetables were 5 and 12 tons per acre – that is, double the premise of the calculation behind Yamada's recommendation.⁹² A different report written by a research officer in Medan, Sumatra, uses an average annual productivity level of tapioca as high as 16.2 tons per acre, to make a grand estimate that a community of 5 million residents could be fed by 20,000 professional farmers.⁹³ Yamada carefully used much lower estimates, taking into account the poor soil condition of the newly cultivated land and the low skill levels of newly recruited farmers. His calculations indicated that, realistically, if the military did not hand over half of their good farmland, which was then poorly

managed, significant difficulty would be caused to the local population and Japanese Municipality staff alike. This was a stark criticism of the inefficiency in management and wasted acreage of land under military control.

Around the same time that Yamada was frantically calculating the size of the necessary farmland, he also had his co-author write up the results of the household expenditure survey of Malaya. The results of the cost of living survey were expected to reveal how the living standards of the locals had declined since the pilot survey in 1943, and whether the actions taken by the Chōsabu to crack down on harmful practices of military monopoly and to respect local businesspeople had really had any effect. Yamada and his co-author could thus provide their own verdict on the two years of Chōsabu work. Based on a mixed sample of what seemed to be average-level ordinary households – teachers and officers as well as coolies and street hawkers – the household spending records, which cover half a year from November 1943 to April 1944, reveal the effect of reduced rations in February 1944 as well as the effect of ongoing high inflation. Expenditure survey results in monetary terms show that many of the items bought by ordinary families were either price controlled or rationed, so their expenditure did not rise as fast as the market price.

The survey results of quantities consumed show that the slower rise of household spending was also a manifestation of reduced rations. The combined amounts of daily carbohydrates – including rice, sweet potatoes and tapioca – were: Malays 282g, Indians 386g and Chinese 375g in February – April 1944, when ration reductions hit households hardest. The combined amounts of protein (mostly fish) were: Malays 70g, Indians 55g and Chinese 75g, which saw 10-20 percent reductions compared to November 1943 - January 1944.⁹⁴ Many households received special rations of tapioca bread, sugar and coconut oil, and supplemented their diets with food bought outside rations - namely

a substantial amount of vegetables, beans and coconuts from the unregulated market. The levels of their calorific intake were on or above the bare subsistence level that the Chōsabu recommended in March 1944 at: Malays 1470 kcal, Indians 1956 kcal and Chinese 1826 kcal daily.

Yamada and his co-author seem to have conducted the second round of the household expenditure survey from May 1944, and intended to write it up too, but only the first round of the survey was published belatedly in October 1944. Had the second survey results been published, they might have provided a real verdict on their efforts to increase food supply over half a year in Singapore. The statement of actual monthly supplies to Syonan Municipality, which was seized by the British Military Administration, tells us that on average 4,572 tons of rice (5.4 kg per person for the population of 850,000) were received and distributed as rations between May and December 1944. The situation worsened in February and March 1945 with severe Allied bombing, but recovered towards the end of the war.⁹⁵

In the final months of occupation in 1945, Yamada – while also attending compulsory drills to blow up tanks with suicide bombs wrapped in blankets – was working frantically to push through an evacuation project in the Municipality. The project, which started with the Endau Settlement, had been expanded to other locations and had now been swamped with applicants. The Japanese thought that the British would occupy Pulau Ubin by July and start bombing Singapore. Evacuees were given rice, salt, sugar and military scrip and sent to the peninsula by train, or to Java or Sumatra by boat. All the survey research assistants of the various ethnic groups helped Yamada to send people out. On 13 August, as the final boatload of 300 people left Keppel Harbour, he wished it a safe arrival in Jakarta. Had it not arrived safely, he could have been accused of war crimes for unnecessarily risking the lives of Singaporeans.

After the Unconditional Surrender

The announcement of surrender on 15 August 1945 was calmly accepted by the Chōsabu members and Japanese civilian administrators, who were prepared to die with the locals. The town was kept under control until the British arrived on 6 September. None of Yamada's multi-racial team of survey assistants at Syonan Municipality was accused of helping the Japanese occupation.⁹⁶ After the arrival of the British, the Japanese in Singapore voluntarily constructed a concentration camp in Jurong from scratch. Yamada lived there for half a year, in company with other Japanese civilians, growing vegetables and farming fish in the pond. A one-year supply of rice, miso and soy sauce was brought in from the Syonan Municipality storage, and eventually the British started to provide rations, including chocolate.⁹⁷ Until he was allowed to board ship for Japan on 13 April 1946, Yamada translated documents for the British.

In March 1946, back in Japan, the Institute of East Asian Economies was renamed the Institute of Economic Research. The membership list of the new Institute tells us that although its name was changed, its members and the structure remained the same: the University president Takase was the director of the Institute; Akamatsu, Itagaki and a few others were described as 'on a research expedition in the south'. In August 1946, a new university president was elected and a 'Purge Qualification Committee' was set up at Tokyo University of Commerce, following a decree from General Headquarters of the Supreme Commander of the Allied Powers.⁹⁸ Sugimoto, who went to the south with Akamatsu, although only for six months, was selected as a member of the Committee. As in many organizations in Japan, those who were seen to have fascist ideas were purged and those who had liberal ideas and had been made redundant during the war came back to their

offices. Three people were purged from Tokyo University of Commerce. One of them had written an essay called ‘The historical inevitability of the Great East Asia Co-prosperity Sphere’ in the *Annual Report on East Asian Economy*.

In the same volume, Akamatsu contributed a paper entitled ‘Historical patterns of East Asian trade’, which comprised tables on Japanese and Chinese world trade statistics from the late 19th century to the early 20th century.⁹⁹ Akamatsu’s catching-up theory was a story of export-oriented industrialization, as seen in the growth of textile industry in Japan, and could only function in a world of free trade and regional specialization. Akamatsu’s vision was not central to the Chōsabu’s work in Singapore and Malaya because it was not workable in the Co-prosperity Sphere or the local self-sufficient economy created by the Japanese military. Having a pro-free trade emphasis in their research, Akamatsu and all the other researchers who were sent to the south survived the purge.¹⁰⁰ Yamaguchi, who had been sent to Shanghai, was said to have shed tears when seeing one of the purged professors leaving the University.¹⁰¹

Ōtsuka, who was not employed by the University during the war, was allowed to come back to the University and was asked to become the new director of the Institute by its younger members in September 1946. A Reconstruction Committee for the Institute was set up in November 1946 with Ōtsuka, Akamatsu, Nakayama and Sugimoto as elected tenured professors, and eight elected younger members, including Yamada and Higuchi. At the end of 1947, all the members submitted their resignations, and in January 1948, Ōtsuka chose who were to remain at the Institute, and himself prepared to resign. Only Yamada and Tsuru Shigeto (1912-2006) were asked to remain, and the latter was nominated as the new director.¹⁰² Tsuru had come back from the US, where he had studied in the company of Paul Samuelson and Kenneth Galbraith and had been awarded a Ph. D. in Economics from Harvard University in 1940.

He had started teaching, immediately before the outbreak of the war, when he returned to Japan and joined the Institute of East Asian Economies. Nakayama became president of the now renamed Hitotsubashi University in October 1948.

Higuchi published *Analysis of Inflation in Japan* with Yamaguchi in 1948.¹⁰³ They criticized the payment of a large sum of money (1,000 yen per person) to the few million civilian returnees from Korea, Taiwan, China and other occupied areas as the cause of high inflation and the divergence between 'effective demand' and industrial production in the course of reconstruction in Japan. In the world of free speech after the war, they vocally argued that printing a large quantity of paper money could not stimulate production in post-war Japan. Higuchi published it as a researcher at Tokyo University of Commerce's Institute of Economic Research, but later found a tenured post in Yokohama City University.¹⁰⁴ He took early retirement from the University in 1970 aged 64 before he died of illness the following year. He never wrote or spoke publicly about his wartime experience.

Yamada translated into English his Malayan household expenditure surveys when he was a visiting scholar at the University of Malaya in the early 1960s, and left a copy there. He also wrote articles entitled 'Measuring Changes in Economic Structure with Special Reference to the Industrial Population in Malaya' and 'Input-output Model of a Dual Economy' for the newly established *Malaysian Economic Journal* on its first issue. He also wrote, in English, *Theory and Application of Interindustry Analysis* (1961), reflecting his wartime interest in Wassily Leontief's concept of input-output tables.¹⁰⁵ He taught at Hitotsubashi University until his retirement and also served as the President of the Japanese Statistical Society between 1976 and 1978. He had an edited book in English dedicated to him on his retirement: *Technology, Organization and Economic Structure: Essays in Honour of Prof. Isamu Yamada*.¹⁰⁶ While his friend and colleague Itagaki wrote publicly on his pre-war visits to Java and

wartime experience in Malaya, and became instrumental in establishing the Institute of Developing Economies, gaining credits as a pillar of Asian research in Japan, Yamada never talked about his wartime existence even to his family until his death in 1986. He left a bundle of handwritten memoirs on his desk to be found by his family after his death.¹⁰⁷

Concluding Remarks

This article shows how the Chōsabu men from the Institute of East Asian Economies of the Tokyo University of Commerce became involved in running the economy of Singapore during the course of war. They were ordinary academics, well-established in their professions, who viewed the opportunity of going to the south as a chance to continue research projects of their own preferences without being conscripted into the war effort. Before and during the war, methods of data collection and data analysis were being modernized and standardized within the government and academic institutes. The Japanese Military Administration in Singapore recognized the importance of accurate measurement of the economy, and thought the Chōsabu men could be used to stabilize the economy. Within a limited time and in adverse circumstances, the Chōsabu managed to produce a large number of original reports, providing a truthful picture of wartime economy as seen through their own eyes. If they had had more time and manpower, a more comprehensive research programme such as comparative surveys across different occupied areas within the Southern Regions might have been possible. Nevertheless, in terms of the economy of Singapore alone, the reports written during the occupation provide a useful guide, while also accounting for the dilemma that the members had to cope with, torn between their sympathy towards the local populace and the demands of the military.

The Chōsabu members had to hide their regrets in having tried to help the local population, and in initiating modern economic research in Singapore and Malaya. After the war, they could not but feel quietly ashamed of their association with the army during the Japanese occupation. In post-war Japanese society, many of them – apart from Itagaki and Akamatsu – felt it difficult to give an adequate explanation of their struggle during the war.

The reason neither Akamatsu's development theory nor Itagaki's colonialism became central to or even noticeable in the Chōsabu's research reports may be partly due their extreme care not to leave written documents with their names on. Other reasons may be, as noted already, their visions of development and imperialism being more closely linked to the world of free trade than the controlled economy. They realized on their arrival in Singapore that any form of 'building Asia' had already become unrealistic. The war economy was led by the optimistic research and planning activities of other departments and by private companies that had taken over mining and manufacturing activities all over the Southern Regions before the Chōsabu's arrival. Thus, Akamatsu, Itagaki and a few others may have decided rather than restricting themselves to academic research to become active behind the scenes of the Military Administration. Further research is, however, necessary before forming any conclusions about their actual wartime involvement.

The Chōsabu reports and other related documents were left untouched in the library of the Institute of Economic Research at Hitotsubashi University for many decades.¹⁰⁸ Despite their devoted efforts during the occupation years, the contributors and named authors of the Chōsabu reports – namely the junior scholars – tended to stay silent throughout their lives. Yamada's memoir was only found posthumously, and was privately printed by his colleague and friend Itagaki in the 1980s. A careful reading of the Chōsabu reports reveals that, despite their association with the army and with the failed attempt for

Malayan independence, the experience of each Chōsabu member was far more complicated and full of dilemmas.

The individual Chōsabu members' experiences and how they reacted during their assignment in Singapore and Malaya differed widely. As the surviving reports reveal, Akamatsu and Itagaki's pre-war agendas were not pronounced, while Higuchi and Yamada appeared to possess different ideas to one another and different attitudes towards the Military Administration. Many of their activities were governed by fear. Despite their inability to prevent socio-economic turmoil and mass malnutrition, however, the Chōsabu men openly disputed the military factions using their right to make judgments on the policies of the Military Administration. This may have contributed to keeping the population of Singapore from the mass starvation that affected all other parts of Japanese-occupied Southeast Asia, including many of the rice-producing areas that were forced to deliver their crops.¹⁰⁹

* This article was written as one of the introductory notes on the forthcoming monograph: Gregg Huff and Shinobu Majima, eds., *World War II Singapore: the Chōsabu Reports on Syonan* (National University of Singapore Press), which includes an English translation of a selection of reports written by the Department of Research team. For further details and discussions, please refer to the forthcoming book.

Notes

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- 2) Kojima Kiyoshi, ed., *Akamatsu Kaname Hakase Kanreki Kinen Ronshū: Keizai Seisaku to Kokusai Bōeki [Economic Policy and International Trade]* (Tokyo: Shunjyūsha, 1958); Ikeo Aiko, *Hyōden Nihon no Keizaishisō: Akamatsu Kaname [Biographies of Japanese Economic Thoughts: Akamatsu Kaname]* (Tokyo: Nihon Keizai Hyōron Sha, 2008); Itagaki Yoichi, *Asia to no Taiwa [Conversation with Asia]* (Tokyo: Ronsōsha, 1988); Itagaki Yoichi, ‘Malaya Fukugō Shakai ni Okeru

Nationalism no Hatten [The Development of Nationalism in Malayan Compound Society]’, *Hitotsubashi University Research Annual: Economic Research*, Departmental Bulletin Paper no. 6, March 1962; Cheah Boon Kheng, ‘The Japanese Occupation of Malaya, 1941–1945: Ibrahim Yaacob and the struggle for Indonesia Raya’, *Indonesia*, vol. 28, October 1979; Karashima Masato, *Teikoku Nihon no Asia Kenkyū [Research on Asia by Imperial Japan]* (Tokyo: Akashi Shoten, 2015).

- 3) Su Fang Ng, ‘Chin Kee Onn’s Ma-rai-ee and the Narration of the Malayan Nationalist Subject in the Aftermath of the Pacific War’, *Journal of Commonwealth Literature*, vol. 34, no. 1, 1999, p. 87.
- 4) Tokugawa Yoshichika, *Saigo no Tonosama [The Last Samurai Lord]* (Tokyo: Kōdansha, 1973); Odabe Yūji, *Tokugawa Yoshichika no Jūgonen Sensō [Tokugawa Yoshichika’s Fifteen Year War]* (Tokyo: Aoki Shoten, 1988); Shinozaki Mamoru, *Singapore Senryō Hiwa: Sensō to sono ningenzō [Secret Stories of the Occupation of Singapore]* (Tokyo: Hara Shobō, 1976); Shinozaki Mamoru, *Syonan – my story: the Japanese occupation of Singapore* (Singapore: Times Books International, 1975); Paul Kratoska, *The Japanese Occupation of Malaya 1941–1945* (London: Hurst & Co., 1998), p. 97.
- 5) Akamatsu Kaname, ‘A Theory of Unbalanced Growth in the World Economy’, *Weltwirtschaftliches Archiv [Review of world Economics]*, vol. 86, no. 2, 1961, pp. 192–215; Akamatsu Kaname, ‘A Historical Pattern of Economic Growth in Developing Countries’, *Developing Economies*, vol. 1, 1962, pp. 1–23.
- 6) Akamatsu Kaname, ‘Wagakuni Yōmō Kōgyōhin no Sūsei [Trend of Japan’s Woollen Goods Industry]’, *Shōgyō Keizai Ronsō*, vol. 13, 1935, pp. 129–212.

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- 7) ‘Nanpō Gunsei Chōsa Keikaku An [Southern Military Administration Research Plan] 16 August 1942’, based on Riku-a-mitsu Order No. 2772, in Akashi, ed., *Documents of Sakakibara Family*, vol. 7, 1942.
- 8) Ko Yamada Isamu Sensei Tsuitō Bunshū Kankō Sewanin Kai [a group of caretakers publishing the memoir of deceased Professor Yamada Isamu], *Riron to Keiryō ni Tesshite: Yamada Isamu Sensei Tsuitō Bunshū [Devoted to Theory and Quantification: Anthology in Memory of Professor Yamada Isamu]* (Tokyo: Ronsōsha, 1987); *Interview Record D, Japanese Military Administration 6*, Tokutei Kenkyū, ‘Bunka Masatsu [Cultural Friction]’ (Tokyo: Daigaku Kyōyō Gakubu Kokusai Kankei Kenkyūshitsu, 1979).
- 9) More than half the Chōsabū reports have a ‘verdict’ section at the beginning; others start with a ‘summary’ or an ‘introduction’.
- 10) Chin Kee Onn, *Malaya Upside Down* (Singapore: Jitts & Co. Ltd., 1946). His background and his own wartime involvement are not documented in the book.
- 11) Japanese National Institute for Defence Studies, Military Archives Collection [hereafter NIDS], Nansei Gunsei 47, ‘Perak dokō jijō ni tsuite [Matters related to the Sultan of Perak]’, *Chōsabū News*, vol. 4, 21 June 1944, pp. 3–6; NIDS, Nansei Gunsei 18, *Chōsabū Report no. 41: Dokō Kankei Shūkyō Gyōsei Sankō Shiryō [Reference Materials on Sultan’s Religious Administration]* (Singapore: Southern Military Administration Chōsabū, July 1944).
- 12) Kawai Juntarō, a professor of commodity studies, attended the meeting at the beginning, but after he returned to Japan together with other professors, Taniyama Seizō, a researcher on agriculture and forestry, took over the role of an observer in this committee.
- 13) See later section on ‘Spring 1943: Setting the Scene’.

- 14) Hitotsubashi University, Institute of Economic Research Library [hereafter IER], Azb: 48, ‘Syonan seikatsu hitsujuhin kouri kakaku shirabe [Survey of retail prices of everyday necessities in Singapore], April 1943–April 1944’, *Chōsabu News*, vol. 2, 25 May 1944; NIDS, Nansei Malaya/Java 412, *Syonan Seikatsu Hitsujuhin Kouri Kakaku Gaikyō [Summary Report on retail prices of everyday necessities in Singapore]* (Singapore: Southern Military Administration, June 1944).
- 15) NIDS, Nansei Gunsei 29, *Syonan Tokubetsushi Jūyō Kōjō Genjō Gaikyō [Important Industrial Factories in Syonan Municipality]* (Singapore: Southern Military Administration, Department of General Affairs, Research Office, March 1943); NIDS, Nansei Gunsei 29, *Keizai Hoan ni kansuru Jōkyō Shirabe, Syonan Tokubetsushi oyobi Johore shū [Conditions of Economic Security in Syonan Municipality and Johore]* (Singapore: Southern Military Administration, Department of Police Administration, March 1943).
- 16) NIDS, Nansei Gunsei 16, *Chōsabu Report no. 12: Syonan-shi ni okeru Minzoku betsu Saitei Seikatsu Jittai Chōsa: Minzoku betsu Jūyō Seikatsu Hitsujuhin ni kansuru Kakaku, Sūryō oyobi Hitsuju no Teido no Chōsa wo chūshin to shite [The Real State of the Lowest Level of Living by Ethnic Group in Syonan Municipality: Price, Quantity and the Relative Importance of Daily Necessities, by Ethnic Group]* (Singapore: Southern Military Administration Chōsabu, October 1943).
- 17) NIDS, Nansei Gunsei 18, *Chōsabu Report no. 35: Syonan Tokubetsushi wo chūshin to seru Bukka Taisaku [Countermeasures on Price, especially in Syonan Municipality]* (Singapore: Southern Military Administration Chōsabu, March 1944).
- 18) IER, Azb: 8, *Chōsabu Report no. 51: Malay tokuni Syonan Tokubetsushi*

ni okeru Beikoku Yunyū ni tsuite [Rice Imports in Malaya, especially in Syonan Municipality] (Taiping: Malayan Military Administration Chōsabu, October 1944); IER, Azb: 3, *Chōsabu Report no. 44: Syonan tōnai Shokuryō Zōsan Saku ni tsuite [Methods of Increasing Food Production on Syonan Island]* (Taiping: Malayan Military Administration Chōsabu, October 1944); IER, Azb: 4, *Chōsabu Report no. 45: Syonan Tokubetsushi Syōgyōseibi ni tsuite [Reorganizing Commercial Businesses in Syonan Municipality]* (Taiping: Malayan Military Administration Chōsabu, September 1944); IER, Azb: 5, *Chōsabu Report no. 47: Syonan Tokubetsushi Rōmu Jijō Chōsa: Hōjin Keiei Kōgyō wo chūshin to shite [A Study of the Labour Situation in Syonan Municipality Focusing on Factories Managed by Japanese]* (Taiping: Malayan Military Administration Chōsabu, October 1944).

- 19) Hitotsubashi Daigaku Gakuenshi Hensan Jigyō Inkaei, ed., *Dainiji Taisen to Hitotsubashi [WWII and Hitotsubashi]* (Tokyo: Hitotsubashi Daigaku Gakuenshi Hensan Jigyō Inkaei, 1983), p. 20.
- 20) Nishizawa Tamotsu, ‘Fukuda Tokuzō no Keizai Shisō: Kōsei Keizai, Shakai Seisaku wo chūshin ni [Economic Ideas of Fukuda Tokuzō]’, *Hitotsubashi Ronsō*, vol. 132, no. 4, 2004, pp. 357–385.
- 21) Sydney J. Chapman, *The Lancashire Cotton Industry: a study in economic development*, Reprint (Clifton, N.J.: A.M. Kelley, 1973).
- 22) Ueda Teijirō, *Ueda Teijirō Nikki [Diary of Ueda Teijirō]* (Tokyo: Keiō Tsūshin, 1963), pp. 126–206, 388; Nishizawa Tamotsu, ‘Ueda Teijirō no Keizai Shisō: Shakaikaizō to Kigyōsha wo chūshin ni [Economic Ideas of Ueda Teijirō]’, in Sugihara Shirō, ed., *Kindai Nihon to Igrisu Shisō [Modern Japan and British Philosophy]* (Tokyo: Nihon Keizai Hyōron Sha, 1995), pp. 152–3.

- 23) Akamatsu Kaname, ‘Ueda Sensei to Shōdai Tōa Keizai Kenkyūjo [Prof. Ueda and the Research Institute for East Asian Economies at Tokyo University of Commerce]’, *Hitotsubashi Ronsō*, vol. 7, no. 1, 1941, p. 112.
- 24) Ōtsuka Kinnosuke, *Ōtsuka Kinnosuke Chosaku Shū [Writings of Ōtsuka Kinnosuke]*, vol. I (Tokyo: Iwanami Shoten, 1980), p. 423.
- 25) Sugimoto Eiichi, *Beikoku Juyō Hōsoku no Kenkyū [A Study of Patterns of Rice Demand]* (Tokyo: Iwanami Shoten, 1925); Japan Statistical Office of the General Administrative Agency of the Cabinet, *Kakei Chōsa Kekka no Gaiyō [Summary of Household Expenditure Survey] October 1941 – September 1942* (Tokyo: Statistical Office of the General Administrative Agency of the Cabinet, 1977).
- 26) Sewanin Kai, *Devoted to Theory and Quantification*, p. 16.
- 27) Yamada Isamu, *Tōa Nōgyō Seisan Shisū no Kenkyū: Naichi, Chōsen, Taiwan no bu [A Study of East Asian Agricultural Production Indices]*, Institute of East Asian Economies monograph no. 1 (Tokyo: Nihon Hyōron Sha, 1942).
- 28) Odaka Kōnosuke, ‘Senji-ka no Gakumon to Kenkyū [Scholarship and Education during the War]’, *Josuikai Forum*: 7/8, uploaded on 1 April 2008, available at: <https://www.josuikai.net>.
- 29) Japan Cabinet Statistical Office, *Kakei Chōsa Kekka no Gaiyō [A Summary of Household Expenditure Survey Results] October 1941 – September 1942* (Tokyo: Cabinet Statistical Office, 1977).
- 30) Southern Military Administration Superintendent General’s Office, ‘Shōkō-ren Meibo Kōtōkan-ren Meibo [List of Officers’ Names, List of Higher Civil Administrators’ Names] 21 March 1943’, in Akashi, ed., *Documents of Sakakibara Family*, vol. 7. Akamatsu was on grade 2-5, Higuchi on grade 6-8 as a civil administrator and Yamada on grade 7-6 (grade 7 is the

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lowest rank).

- 31) Odaka, 'Scholarship and Education during the War'.
- 32) Itagaki, *Conversation with Asia*, p. 145; Karashima, *Research on Asia*, pp. 67–75.
- 33) Yamaguchi Shigeru and Higuchi Gorō, *Nihon Inflation no Bunseki [Analysis of Inflation in Japan]*, Monographs in Modern Economics no. 12 (Tokyo: Tōyō Keizai Shinpō Sha, 1948).
- 34) Institute of East Asian Economies, *Tōa Keizai Nenpō [Annual Report on East Asian Economy]*, vol. 1 (Tokyo: Nihon Hyōron Sha, 1942).
- 35) Yamada, *East Asian Agricultural Indices*.
- 36) Institute of East Asian Economies, *Tokyo Sangyō Daigaku Tōa Kenkyūjo Gaiyō [A Summary of the Institute of East Asian Economies at Tokyo University of Industry]*, Tokyo Sangyō Daigaku Tōa Kenkyūjo: 1943. Tokyo University of Commerce was renamed Tokyo University of Industry during the war because commerce was seen as unnecessary occupation in military-governed Japan.
- 37) Hitotsubashi, *WWII and Hitotsubashi*, p. 21.
- 38) Institute of East Asian Economies, *Summary of the Institute of East Asian Economies*.
- 39) Hara Kakuten, *Gendai Asia Kenkyū Seiritsushi Ron [A Study of the History of Modern Asian Studies]* (Tokyo: Keisō Shobō, 1984), p. 57.
- 40) NIDS, Nansei Gunsei 27, *Shōwa 19 nendo Malay-chiku Chōsa Keikaku [A (Draft) Research Plan for the Malaya Region in 1943]* (Singapore: Southern Military Administration, Chōsabu, June 1943); Southern Military Administration Superintendent General's Office, 'Gunsei Sōkanbu Sōmubuchō Kōen Yōshi [Lieutenant General Tanakhashi Tan: a Summary of Speech by the Director of General Affairs Department, Southern Military

- Administration Superintendent General's Office] 8 February 1943', in Akashi, ed., *Documents of Sakakibara Family*, vol. 6.
- 41) NIDS, Nansei Gunsei 29, *Important Industrial Factories in Syonan Municipality* by General Affairs Research Office.
- 42) Chin, *Malaya Upside Down*, p. 184.
- 43) NIDS, Nansei Gunsei 29, *Important Industrial Factories in Syonan Municipality* by General Affairs Research Office, p. 28.
- 44) IER, Bn: 4, *Genchi Jikatsu Gokanen Keikaku [A (Draft) Five-year Plan for Local Self-sufficiency]* (Singapore: Southern Military Administration, Department of General Staff, September 1943).
- 45) Singapore Shisei Kai, ed., *Syonan Tokubestushi Shi: Senji chū no Singapore [History of Syonan Municipality]* (Tokyo: Nihon Singapore Kyōkai, 1987), p. 220.
- 46) NIDS, Nansei Gunsei 29, *Conditions of Economic Security in Syonan Municipality and Johore*, by Police Administration.
- 47) Chin, *Malaya Upside Down*, p. 59.
- 48) IER, Azb: 48, 'Syonan Tokubetsushi shuyō shokuryō haikyū kikō ni tsuite [Syonan Municipality Major Food Rationing Organizations]', *Chōsabu News*, vol. 6, 20 July 1944, p. 7.
- 49) Shisei Kai, *History of Syonan Municipality*, pp. 220–221.
- 50) NIDS, Nansei Gunsei 29, *Conditions of Economic Security in Syonan Municipality and Johore*, by Police Administration.
- 51) NIDS, Nansei Gunsei 16, *Chōsabu Report no. 12: The Lowest Level of Living by Ethnic Group*.
- 52) Chin, *Malaya Upside Down*, p. 60.
- 53) IER, Azb: 50, *Chōsabu Report no. 26: Syonan Tokubetsushi no Shokugyō betsu Jinkō [Syonan Municipality Population by Occupation]* (Singapore:

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- Southern Military Administration Chōsabu, December 1943).
- 54) Shinozaki, *Secret Stories of the Occupation of Singapore*, p. 98.
- 55) IER, Azb: 50, *Chōsabu Report no. 26: Syonan Municipality Population by Occupation*, p. 14.
- 56) IER, Azb: 27A, *Chōsakikan Shunin Kaidō Hōkokusho [Report on the Heads of Research Conference], 11–12 Oct. 1943*, (Singapore: Military Administration Chōsabu, 1943). Research on fauna and flora included the development of military technology using luminescent bacteria at the Southern Department of Epidemic Prevention and Water Purification.
- 57) Akashi Yōji, ‘Japanese research activities in occupied Malaya/Singapore’, in Akashi Yōji and Yoshimura Mako, eds., *New perspectives on the Japanese occupation in Malaya and Singapore, 1941–1945* (Singapore: NUS Press, 2008).
- 58) Shinozaki, *Secret Stories of the Occupation of Singapore*, p. 100.
- 59) NIDS, Nansei Gunsei 18, *Chōsabu Report no. 35: Countermeasures on Price in Syonan*.
- 60) Kratoska, *Japanese Occupation*, p. 253.
- 61) NIDS, Nansei Gunsei 18, *Chōsabu Report no. 35: Countermeasures on Price in Syonan*. The total of 1469 kcal is a barely life-sustaining level of calorific intake for a man of 1m 42cm with a BMI of 22.
- 62) Harold Atcherley, *Prisoners of Japan* (Cirencester: Memoirs, 2012), p. 275.
- 63) NIDS, Nansei Gunsei 18, *Chōsabu Report no. 35: Countermeasures on Price in Syonan*.
- 64) IER, Azb: 8, *Chōsabu Report no. 51: Rice Imports in Malaya, especially in Syonan Municipality*.
- 65) Paul Kratoska, ‘Malayan Food Shortages and the Kedah Rice Industry’, in Kratoska, ed., *Food Supplies and the Japanese Occupation in Southeast*

- Asia* (Basingstoke: Macmillan, 1998), p. 115.
- 66) Akashi Yōji, ‘Japanese policy towards the Malayan Chinese, 1941–1945’, *Journal of Southeast Asia Studies*, vol. 1, no. 2, 1970, pp. 61–89; IER, Azb: 48, ‘Penang Eppōsho no kaisetsu [Establishment of a Reading Room in Penang]’, *Chōsabu News*, vol. 4, 20 June 1944, p.19.
- 67) Nami Kikan was established in late 1943, after the Allied bombing of seven Navy ships in Seletar Island; Ibaragi Kikan of the 7th Area Army – in charge of special manoeuvres – and Shio Kikan of the Navy – also in charge of marine intelligence – were set up at the same time (Shinozaki, *Secret Stories of the Occupation of Singapore*, p. 97).
- 68) IER, Azb: 8, *Chōsabu Report no. 51: Rice Imports in Malaya, especially in Syonan Municipality*.
- 69) IER, Azb:8, *Chōsabu Report no. 51*; NIDS, Nansei Malaya/Java 412, *Malay Tōkei [Malay Statistics]*, no. 3 Penang (Penang: Penang State Government, January–June 1944).
- 70) Akashi, *Interview Record D: Japanese Military Administration 6*, pp. 115–167.
- 71) Kratoska, *Japanese Occupation*, p. 252; IER, Azb:8, *Chōsabu Report no. 51: Rice Imports in Malaya, especially in Syonan Municipality*.
- 72) United Kingdom National Archives [hereafter NA], WO203/4499, ‘Rice – S.E.A.C. Territories’, p. 58. The author would like to thank Professor Gregg Huff of the University of Oxford for sharing a copy of this document.
- 73) Other reports written by Higuchi were: IER, Azb: 50, *Chōsabu Report no. 23: Zairai Tsūka Kaishū Mondai ni tsuite [On Issues related to Withdrawal of Local Currency]* (Singapore: Southern Military Administration Chōsabu, December 1943); IER, Azb: 1, *Chōsabu Report no. 36: Malay ni okeru*

- Inflation no Jōkyō to Sono Taisaku [Inflationary Situation in Malaya and its Countermeasures]* (Taiping: Malayan Military Administration Chōsabu, April 1944); IER, Azb: 10, *Chōsabu Report no. 55: Malacca Shū Shokuryō Tōsei Mondai tokuni Kōtei Kakaku-sei Haishi ni tsuite [On the Issue of Food Control in Malacca Region, particularly the Repeal of the System of Official Pricing]* (Taiping: Malayan Military Administration Chōsabu, November 1944); and IER, Azb: 13, *Chōsabu Report no. 61: Malay ni okeru Seisen Shokuhin Tōsei Hōshiki to Nijū Kakaku-sei Mondai ni tsuite [On the System of Controlling Perishable Foods and the Issue of Double Pricing in Malaya]* (Taiping: Malayan Military Administration Chōsabu, January 1945).
- 74) IER, Azb: 48, ‘Chōsabu nisshi [Chōsabu diary]’, *Chōsabu News*, vol. 3, 5 June 1944, pp. 35–36.
- 75) IER, Azb: 48, ‘Malay ni okeru inflation no jōkyō to taisaku [Inflationary situation in Malaya and its countermeasures]’, *Chōsabu News*, vol. 2, 25 May 1944, p. 23.
- 76) IER, Azb: 48, ‘Survey of prices in Singapore’, *Chōsabu News*, vol. 2; NIDS, Nansei Malaya/Java 412, *Summary of Prices in Singapore*.
- 77) IER, Azb:48, *Syonan Seikatsu Hitsujuhin Kourikakaku Gaiyō [Summary of retail prices of daily necessities in Singapore], May 1944*, (Taiping: Malaya Military Administration Chōsabu, June 1944), p. 2. Household expenditure survey results could theoretically provide the weights for the retail price indices, but in practice they were not used for this purpose at this stage. The report on the survey results was published belatedly in October 1944 (see note 93 below).
- 78) IER, Azb: 48, ‘Syonan bukka no dōkō [Movement of prices in Singapore], June 1944’, *Chōsabu News*, vol. 6, 20 July 1944, pp. 15–18.
- 79) Kratoska, *Japanese Occupation of Malaya*, p. 166; Chin, *Malaya Upside*

Down, p. 88.

- 80) IER, Azb: 10, *Chōsabū Report no. 55: Repeal of the System of Official Prices in Malacca*; IER, Azb: 13, *Chōsabū Report no. 61: Control of Perishable Foods and Double Pricing*.
- 81) IER, Azb: 10, *Chōsabū Report no. 55: Repeal of the System of Official Prices in Malacca*, p. 20.
- 82) IER, Azb: 48, ‘Syonan haikyū kikō [Rationing organization in Singapore]’, *Chōsabū News*, vol. 6, 20 July 1944, pp. 1–7; IER, Azb: 13, *Chōsabū Report no. 61: Control of Perishable Foods and Double Pricing*, pp. 60–61.
- 83) IER, Azb: 4, *Chōsabū Report no. 45: Syonan Tokubetsushi Syōgyōseibi*.
- 84) Some memoirs state that the whole resettlement programme was one of Shinozaki’s ingenious ideas, but Shinozaki himself recalls it as being a response to *Operation Command no. 1: Evacuation of the Locals*. This was sent directly from Tokyo headquarters after the bombing of seven ships in September 1943, and set the goal of evacuating 300,000 people from Syonan. By the end of the war, 1200–1700 families, promised complete freedom from the Japanese army, had been sent to Endau Settlement, to cultivate new land and build their own new village.
- 85) Chin, *Malaya Upside Down*, p. 49.
- 86) IER, Azb: 5, *Chōsabū Report no. 47: A Study of the Labour Situation in Syonan Municipality*, p. 26.
- 87) Singapore Shisei Kai, *History of Syonan Municipality*, p. 175.
- 88) Kratoska, *The Japanese Occupation of Malaya 1941–1945*, p. 264.
- 89) IER, Azb: 48, ‘Syonan rationing organizations’, *Chōsabū News*, vol. 6, 20 July 1944, p. 7.
- 90) Worried about the prospect around the same time as Yamada, Lieutenant Takahashi of Changi Prison told the prisoners of war on 10 September that

the supply of vegetables by the Army would cease sooner or later, and that they should try cultivating more. Atcherley, *Prisoners of Japan*, p. 211.

- 91) IER, Azb: 3, *Chōsabu Report no. 44: Methods of Increasing Food Production on Syonan Island*.
- 92) IER, Azb: 48, ‘Syonantō hatasaku nōka jittai Chōsa kanken [A survey of Syonan Island’s vegetable farmers]’, *Chōsabu News*, vol. 6, 20 July 1944, pp. 8–11. The same two researchers, Yamada Hideo and Ōno Seizaburō, also wrote a report criticizing the use of Taiwanese double-cropping rice in Krian, Perak.
- 93) NIDS, Nansei Gunsei 30, *Shokuryō Mondai to Kansho Saibai [Food Problems and Cultivation of Sweet Potatoes]* (Publication place unknown (probably Medan, Sumatra); date unknown (probably spring 1943)).
- 94) IER, Azb: 7, *Chōsabu Report no. 50: Malay-chiku Kakei Chōsa Hōkoku [A Report on the Household Expenditure Survey in Malaya]* (Taiping: Malayan Military Administration Chōsabu, October 1944). The amounts of staple foods consumed in the Chōsabu survey results are lower than their own recommendation made in March 1944 but higher than those recommended by C. L. Dunn and D. D. Pandya, *Indian Hygiene and Public Health* (Calcutta: Butterworth & Co., 1925), showing as the bare sustenance level, the amounts of starch at 213g (873 kcal) and protein at 60g (246 kcal), fat at 21g (198 kcal) daily (p. 138). The Chōsabu also used much lower conversion rates into caloric values than Dunn and Pandya - closer to those found on USDA’s National Nutrient Database for Standard Reference.
- 95) NA, WO203/4499, ‘Rice - S. E. A. C. Territories’, p. 57; Atcherley, *The Prisoners of Japan*.
- 96) Sewanin Kai, *Devoted to Theory and Quantification*, p. 43.

- 97) Singapore Shisei Kai, *History of Syonan Municipality*, p. 254.
- 98) Hitotsubashi Daigaku Gakusei Shi Senmon Iinkai, *Hitotsubashi Daigaku Gakusei Shi Shiryō [Historical Material on the Academic Organization of Hitotsubashi University]*, vol. 8 (Tokyo: Hitotsubashi Daigaku Gakuen Shi Henshū Iinkai, 1986), p. 101.
- 99) Kaneko Takanosuke, ‘Daitōa kensetsu no rekishiteki hitsuzensei [Historical inevitability of the Great East Asian Co-prosperity Sphere]’, *Tōa Keizai Kenkyūjo Nenpō*, vol. 1 (Tokyo: Nihon Hyōron Sha, 1942); Akamatsu Kaname, ‘Daitōa bōeki no rekishiteki ruikai [Historical patterns of East Asian Trade]’, *Tōa Keizai Kenkyūjo Nenpō*, vol. 1 (Tokyo: Nihon Hyōron Sha, 1942).
- 100) Akamatsu notes that his PhD thesis *Keizai Shin Chitsujo no Keisei Genri [Theory of the Formation of New Economic Order]*, which was accepted in 1944, after changing the words and ‘eliminating the elements of democracy’, and the book *Kokubō Keizai Ron [The Economics of National Defense]* by Akamatsu and Nakayama could have been a reason to purge Akamatsu from the University, but he survived and returned to teach. Kojima, ed., *Akamatsu Kaname*, p. 49; Akamatsu Kaname, *Keizai Shin Chitsujo no Keisei Genri [Theory of the Formation of New Economic Order]* (Tokyo: Risōsha, 1944); Akamatsu Kaname, Nakayama Ichirō and Ōkuma Nobuyuki, *Kokubō Keizai Sōron [Theory of National Defence Economy]*(Tokyo: Ganshōdō, 1942).
- 101) Odaka, ‘Scholarship and Education during the War’.
- 102) Sewanin Kai, *Devoted to Theory and Quantification*, p. 55.
- 103) Yamagushi and Higuchi, *Analysis of Inflation in Japan*.
- 104) Higuchi Gorō, *Sengo Zaisei Seisaku to Kokumin Keizai Kanjō [Post-war Financial Policy and National Income Calculation]* (Tokyo: Tōyō Keizai

- Shimpōsha, 1950); *Ginkō Riron [Theory of Banking]* (Tōkyō: Toyo Keizai Shimpō Sha, 1963); *Kin'yū Shinron [New Theory of Finance]* (Tokyo: Kin'yū Journal Sha: 1964); *Kokusai Kin'yū Ron [International Monetary Theory]* (Tokyo: Tōyō Keizai Shimpō Sha, 1967); 'Kikeika shita nihon no kin'yū seisaku [Deformation of Japan's Monetary Policy]', in *Keizai Ōrai*, vol. 20, no. 3, March 1968, pp. 42–51.
- 105) 'Measuring Changes in Economic Structure with Special Reference to the Industrial Population in Malaya', *Kajian Ekonomi Malaysia: Journal of the Malaysian Economic Association*, vol. 1, no. 1, June 1964, pp. 59–69; 'Input-output Model of a Dual Economy', *Kajian Ekonomi Malaysia: Journal of the Malaysian Economic Association*, vol. 3, no. 2, December 1966, pp. 59–70; *Theory and Application of Interindustry Analysis*, Economic Research Series no. 4, Institute of Economic Research, Hitotsubashi University (Tokyo: Kinokuniya, 1961).
- 106) Ryūzō Satō and Martin J. Beckmann, eds., *Technology, Organization and Economic Structure: Essays in Honour of Prof. Isamu Yamada*, Lecture notes in economics and mathematical systems (New York: Springer-Verlag, 1983).
- 107) Sewanin Kai, *Devoted to Theory and Quantification*.
- 108) Makoto Ikema, Yoshio Inoue, Tamotsu Nishizawa, Susumu Yamauchi, eds., *Hitotsubashi University, 1875–2000: A Hundred and Twenty-five Years of Higher Education in Japan* (London: Palgrave, 2000); Odaka, 'Scholarship and Education during the War'.
- 109) Aiko Kurasawa, 'Senjiki Malaya Singapore ni okeru beikoku haikyū seido [Rice rationing system in wartime Malaya and Singapore]', *Mita Gakkai Zasshi*, vol. 104, no. 4, January 2012, pp. 623–649; Kratoska, *Japanese Occupation*, p. 255.