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This working paper analyzes demographic change in Southeast Asia's main cities during and soon after the World War II Japanese occupation. We argue that two main patterns of population movements are evident. In food-deficit areas, a search for food security typically led to large net inflows to main urban centres. By contrast, an urban exodus dominated in food surplus regions because the chief risk was to personal safety, especially from Japanese and Allied bombing. Black markets were ubiquitous, and essential to sustaining livelihoods in cities with food-deficit hinterlands. In Rangoon and Manila, wartime population fluctuations were enormous. Famines in Java and northern Indochina severely impacted Jakarta and Hanoi through inflows of people from rural areas. In most countries, the war's aftermath of refugees, revolution and political disruption generated major rural-urban population relocations. Turmoil in the 1940s had the permanent consequences of augmenting the primacy of Southeast Asia's main cities and promoting squatter settlement.

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Urbanization in Southeast Asia during the World War II Japanese Occupation and Its Aftermath¹

Scholarly writing on post-1870 Southeast Asia typically either stops at 1940 or, if it goes on, tries to pick up the story in the early 1950s. Others begin in the 1950s. The divide is deeply entrenched; those who research the region lament a lack of continuity but rarely do much to rectify the 1940s omission. The present paper tries to make some contribution towards linking Southeast Asia's pre-1940 and post-1950 histories by examining urbanization in the region during the 1941 to 1945 Japanese occupation and its aftermath.

While there is almost no comparative work on wartime urban growth, substantial literatures exist on either side of the 1940s gap. For urbanization in Southeast Asia, as Jan Pluvier argues of all aspects of the region, the decades from 1880 to 1940 'clearly stand out as a distinct period in the history of South-East Asia'.² Beginning around 1880, and integral to export-oriented Southeast Asian economic specialization in a few primary commodities, a group of large port cities emerged to handle Southeast Asia's rapidly expanding trade. Ten main cities dominated in their respective countries: Rangoon in Burma, Bangkok in Thailand, Singapore, Penang and Kuala Lumpur in Malaya, Jakarta (colonial Batavia) and Surabaya in Indonesia, Saigon-Cholon and Hanoi in Indochina, and Manila in the Philippines.³ The six biggest cities (which exclude Penang, Kuala Lumpur, Surabaya and Hanoi) were often much larger than second cities in their respective countries. Described as 'gateways', these six cities were the chief intermediaries between Southeast Asia and the West. However, even the

¹ We thank Shingo Kakino, Tjitske Wijngaard and Sarah Womack who provided outstanding research assistance. Gregg Huff gratefully acknowledges support and funding from ESRC grant (RES-062-23-1392 which made this working paper possible.

² Pluvier, *South-East Asia*, p. 4.

³ Malaya was the Malay Peninsula, Penang and Singapore. Indochina included Vietnam, Cambodia and Laos. To avoid a colonial archaism, we refer to Netherlands India as Indonesia. Siam became Thailand in 1939.

six remained relatively modest in size. Just before World War II, their populations converged around a mean of 582,000.⁴

The account of Southeast Asian urbanization that begins with the 1950s relies heavily on the work of geographers. All emphasized a trend towards rapid urban growth and were impressed by the size of Southeast Asia's main cities, which although the same as the pre-war group, were now much larger. D. W. Fryer could, in 1953, herald the emergence of the million city in Southeast Asia.⁵

The main aim of the working paper is to provide, for the first time, data for, and an analysis of, demographic change in Southeast Asia's main cities in the 1940s. We begin to fill a gap in the literature by making available the first set of wartime population data for ten main pre-war Southeast Asian cities. We also attempt, insofar as the often patchy data permits, to identify patterns of population movement for Southeast Asia's main cities, and to explain demographic fluctuations associated with the war and subsequent upheaval.

The paper corrects a misperception in the literature that World War II reversed continuous post-1870s Southeast Asian urban growth and ushered in de-urbanization because hungry populations returned to the countryside to undertake subsistence agriculture.⁶ 'During the Japanese occupation', Fryer argued, 'population decreased in the cities because of the shortage of food'.⁷ We show, to the contrary, that all Southeast Asia's main cities except Hanoi gained large numbers of new inhabitants. Moreover, when basic foodstuffs, principally rice, were acutely scarce, or when scarcity turned into famine, the prevailing

⁴ On pre-war urbanization: Dick and Rimmer, *Cities*; Huff and Angeles, 'Globalization'; Huff, 'Gateway cities'. McGee, *Southeast Asian city* cites post-1950 literature.

⁵ Fryer, "'Million city'".

⁶ Scott, 'Approach', p. 271; Collingham, *Taste*, p. 335.

⁷ Fryer, "'Million city'", p. 491.

tendency, also typical elsewhere, was for substantial net movement to large cities.⁸ In Singapore, Penang, Kuala Lumpur, Jakarta, Surabaya and Manila, the war and the Japanese occupation fuelled unprecedented urban growth.

A lack of primary data precludes examination of all urban change in equal detail. We endeavour, however, to indicate principal patterns, and suggest that during the war urban populations changed principally as a trade-off between food and fear: people balanced the risks of insufficient food against the arbitrarily imposed external dangers of armies, armed conflict and bombs. Our argument is that when basic foodstuffs were scarce a significant share of the population perceived that the best chance of an entitlement to food or some other means of obtaining it was in cities and shifted accordingly. During the latter 1940s, fear arising from political instability and armed conflict produced large fluctuations in several urban populations and fuelled urbanization.

Southeast Asia: Pre-war Characteristics and Japanese Occupation Policy

This section identifies the main economic and demographic features of pre-war Southeast Asia, while the next builds on this context to explain how Japanese occupation policies influenced wartime urbanization. Large parts of pre-war Southeast Asia specialized in producing cash crops like rubber, tea, sugar and minerals with consequent deficits in basic foodstuffs. Japanese enforcement of country, and increasingly regional, autarky became a fundamental determinant of urban growth and change in these food-deficit areas.

Six main features defined pre-war Southeast Asian economic and demographic development. One was extreme specialization in a few primary commodities exported to world markets, and a second the resulting division of Southeast Asian countries into those with large surpluses of basic foodstuffs and those with food deficits which specialized in

⁸ Ó Gráda and Sen document famine-induced cityward migration: Ó Gráda, *Black '47*, pp. 11, 93-94, 104, 161-63, *Famine*, pp. 81-89, 102; Sen, *Poverty*, p. 57.

minerals and non-food cash crops including non-basic foods like tea, coffee and sugar. In Burma, Thailand and Indochina, rice accounted for three- fifths or more of exports. Cash crop exports comprised a similar proportion of exports in Malaya (tin and rubber), Indonesia (sugar, tea, rubber and petroleum) and the Philippines (sugar).

Data for real per capita GDP, although incomplete and partly reliant on informed estimates, suggest that wartime Southeast Asia, cut off from global markets, experienced one of modern history's deepest macroeconomic crises. Japan could use only a fraction of the four main commodity staples — rice, rubber, tin and sugar — which Southeast Asia produced. Between 1938 and 1944, real per capita income fell by approximately half in all countries except Thailand, where by 1945 it had declined by about a fifth.⁹ A third, key, feature was Southeast Asia's integration with Western markets and, as a corollary to this, a highly integrated regional supply of rice. Particularly important was the fact that the Japanese occupation disrupted the hitherto integrated rice markets across Southeast Asia, as well as across regions within each country, such as in Java.¹⁰

The fourth and fifth characteristics were low pre-war levels of import-substituting industrialization in basic consumer goods and weak urbanization. In 1931, Malaya apart, between just 3% and 8% of the population lived in cities of 10,000.¹¹ No Southeast Asian country was more, and most were less, than half self-sufficient in basic textiles. Southeast Asia had to import consumer necessities such as thread, shoes and sandals, matches, paper, batteries, light bulbs and medicines. Import substitution made at best a modest contribution to wartime supply. Occupation essentially fixed Southeast Asia's stock of consumer goods at 1941 levels which were then progressively depleted.

⁹ Huff and Majima, 'Financing' and compare Barro and Ursúa, *Macroeconomic crises*.

¹⁰ van der Eng, 'Productivity' and 'Market responses'.

¹¹ Huff and Angeles, 'Globalization', p. 23.

Wartime absorption of population back into the surrounding countryside was more difficult than limited pre-war urbanization and smallness of even Southeast Asia's main cities might suggest. One reason for this was that pre-war Southeast Asian urbanization often relied substantially on international immigration from India and Southeast China. The former made Rangoon an Indian city. Singapore and Bangkok were Chinese cities, as was Cholon, the main constituent of the twin city of Saigon-Cholon. When pre-war economies contracted, immigrants returned home in great numbers. During the war, however, except for Rangoon, this migration 'safety valve' was not available. Second, by 1940 all Southeast Asia's main cities had a substantial middle class for whom subsistence agriculture was unattractive or impossible.

Sixth, population spread unevenly across Southeast Asia. Much of the region, including Malaya, Burma and Thailand, remained thinly populated. However, in two densely inhabited areas population pressed on resources; many people did not own enough land to feed their families. In parts of Java, densities averaged over 500 per square kilometre, while in several provinces in Tonkin in Indochina around Hanoi they were 500 to 800 per square kilometre. Much of this delta area of northern Vietnam had a person: land: subsistence relationship best described as Malthusian. Famine struck in 1931 and periodically threatened thereafter.¹²

Occupation began in December 1941 with the acceptance of Japanese control by the French colonial administration in Indochina and by Thailand's government. Japanese troops occupied Manila at the beginning of 1942. Thereafter, Penang, Kuala Lumpur, Singapore, Jakarta and Rangoon fell in quick succession. By May 1942, Japan controlled all of Southeast Asia. Manila was re-taken by American forces in March 1945 and Rangoon two

¹² Brocheux and Hémery, *Indochina*, pp. 263, 273-74, 277.

months later by the British. Japanese military administrations remained in place in other cities until Allied troops arrived after the August 1945 Japanese surrender.

Thailand's 'voluntary' December 1941 alliance with Japan helped to alleviate its wartime economic situation. However, having Japan as an ally was probably not decisive, since the Japanese, although taking Thai rice and other commodities, shipped few, and by 1944 no, goods to Thailand. If the Kingdom had not been a rice-surplus area, it is unclear from whence basic foodstuffs would have arrived. Indochina had a working partnership with Japan but nevertheless suffered devastating famine.

The Japanese rigidly adhered to a policy of the military living off the land, of sending a bare minimum of consumer goods to Southeast Asia, and of making countries in the region self-sufficient in basic foodstuffs.¹³ Beginning around mid-1943, to protect food supplies for the Japanese military, an existing policy of country autarky narrowed to regional or even sub-regional autarky within countries.

Macroeconomic contraction and Japanese-enforced autarky most fundamentally affected Southeast Asia because rice was the favoured, and in most of the region the staple, food; because quite uneven access to rice was countered by the highly integrated regional rice market; and because wartime transport disruption undermined intra-regional rice shipments. Partly to make up for a lack of as much rice as desired, pre-war Javanese depended on staples such as cassava, sweet potatoes, maize and tapioca. During the war, in Java, Malaya and elsewhere in Southeast Asia these alternative crops were increasingly grown as rice substitutes.¹⁴ Nevertheless, in practice, rice-deficit areas were deficient in basic foodstuffs, and in this paper have that connotation. Pre-war Malaya produced only about 173,000 tons of clean rice annually and imported 550,000 to 600,000 tons, while the Philippines, although close to self-sufficiency, also depended on imported rice. In 1936, 1.45 million tons of rice

¹³ Japan, Institute of Developing Economies, Japan External Trade Organization, Kishi Collection File No. B1-209, Japan, Imperial Headquarters: *Gozen Kaigi Shidai* (Minutes of Imperial Conference) 5 Nov. 1941, p. 34.

¹⁴ Both, *Indonesian economy*, pp. 48-9, 111-14.

were transported and distributed around Java to ensure sufficient rice supply everywhere. West Java, including Jakarta, relied on inflows of rice from elsewhere on the island.¹⁵

During the war, Java's food-deficit areas faced increasingly severe, and ultimately catastrophic, food shortages. Sharp reductions in harvested areas were caused by greatly below market prices set by Japanese military administrators, the disruption of transport, and regional autarky. The resulting drop in the output of rice, and most other foods, together with strict autarky, particularly impacted Jakarta and Surabaya, even though neither was greatly distant from rice-growing areas. In October 1943, the Japanese divided Java and Madura into 17 districts, prohibited trade between them in rice, and exacted severe penalties on anyone caught contravening the ban.¹⁶ Famine deaths in Java are estimated [to be] at some two to three million, between about 4.5% and 7.0% of the population.¹⁷

In rice-specialized countries, production concentrated in relatively small areas around Rangoon, Bangkok and Saigon-Cholon. Food deficits elsewhere in these countries were normally met by trade with rice-surplus areas. However, in Burma and Indochina this interchange became difficult due to the Japanese military's monopolization of local transport and Allied bombing of bridges, rail lines and local shipping. In 1944 and 1945, famine in Tonkin and three affected provinces of North Annam caused some 1.0 to 1.3 million deaths, at least 10% of the population.¹⁸

Wartime Urbanization

Allowance must be made for uneven data availability and quality in any comparative work on 1940s urban Southeast Asia (see table 1 for full data discussion). Problems arise because of the number of main cities in the region, the discontinuity of political regimes, considerable

¹⁵ van der Eng, *Food supply*, pp. 7-8, 30.

¹⁶ van der Eng, 'Regulation', pp. 197, 203, *Food supply*, pp. 8-9, 25-26; Jong, *Collapse*, p. 221.

¹⁷ Jong, *Collapse*, p. 280; van der Eng, *Food supply*, p. 40; Friend, *Blue-eyed enemy*, p. 264.

¹⁸ Marr, *Vietnam 1945*, p. 104.

war disruption, and disparate sources. Taken together, these prevent analysis of all cities and countries with equal levels of detail or the sureness that data available for Western countries allows.

While the deficiencies in data must be clearly recognized and caution exercised, we judge the data sufficiently good and consistent and with a large enough number of observations to analyze 1940s urbanization patterns. For the pre- and post-war periods, population data come mainly from censuses or official counts and estimates. Comparisons for Bangkok and Manila suffer from a convention of recording data for regions, of which these cities were a part, rather than specifically for the urban area. Wartime data for Thailand and Indochina, where pre-war administrations remained in place, are mainly from official publications, while for Rangoon, Singapore, Kuala Lumpur, Jakarta, Surabaya and Manila they derive chiefly from Japanese sources. Newspapers reporting official figures yield rich data for Jakarta and Surabaya but apparently not for Penang (see table 1 notes). Rationing and a desire for social control gave the Japanese strong motives to mount censuses and population counts. These are judged reasonably reliable as far as the number of people in the urban distribution system were concerned but may understate total urban dwellers because of inflows of migrants hoping to find food.

Two main demographic trends, not so invariant as to constitute a theory but certainly indicative of patterns, are evident (table 1 and figure 1). In the group of cities (Manila, Jakarta, Surabaya, Penang, Kuala Lumpur and Singapore) that did not have hinterlands specialized in producing rice, and so with restricted wartime access to food both in the city and surrounding region, population increased rapidly and far above historic averages. Between 1939 and 1944, Manila's population grew at 13.5% annually, while for Jakarta the annual rate from 1940 to 1944 was 14.2%. Surabaya's population rose by over half between 1940 and 1945, while Penang's population came close to doubling between 1941 and 1947.

The January 1942 population for Singapore, just before its fall, is at best an approximation. Although estimated at a time of chaos and including a large military presence (see table 1 notes), it suggests a large refugee inflow as the Japanese advanced down the Malay peninsula towards Singapore. The proportions of this inflow attributable to fear and, with the collapse of Malaya's economy, a search for food is are unknowable. In 1946, both motives were elements in a new refugee onslaught in which, as Tim Harper argues, 'people gravitated towards food supplies and employment opportunities'.¹⁹ In each instance, once people reached Singapore most apparently remained, which suggests the importance of the ability to obtain food.

Those of Southeast Asia's main cities which gained population during the war did so largely through inwards migration; in all cities natural increase was slight, and by the latter part of the war probably negative. Wartime Jakarta and Singapore grew to nearly a million; Manila topped that level. By 1948, the continuing shortages of food and refugees from conflict between the Dutch and Indonesian Republicans turned Jakarta into a city of over 1.2 million.

Surabaya and Hanoi resembled Singapore, Penang, Kuala Lumpur, Jakarta and Manila in lacking easy access to rice, but showed interesting variations on the rice-deficit pattern. Throughout the war, Surabaya, a pre-war sugar port, conformed to the general food-deficit pattern. Between 1940 and September 1945, population grew by over half from 403,000 to 618,000. However, fear not food drove Surabaya's early post-war demography. In November 1945, three months after Japan's surrender, fierce fighting between Indonesian

¹⁹ Harper, *End*, p. 41.

Republicans and British troops emptied the city.²⁰ Surabaya did not approach its wartime peak until 1949 when it reached 600,000 but by 1951 had added a further quarter of a million.

Hanoi, fully discussed later, lost population during the war, contrary to the characteristic pull that cities exert during famine. Fear was most probably the reason. That motive again dominated during the start the First Indochina War when Hanoi, the scene of intense conflict, became almost deserted. Occupation by the French Expeditionary Force was the driving force behind a return to the city, almost certainly due to greater order and safety. As former residents came back, Hanoi quickly regained its earlier population (table 1).²¹

The other main World War II production pattern, in Burma, Thailand and Indochina, was urban hinterlands specialized in rice production. Wartime population growth in Bangkok and Saigon looks to have been slight; neither city recorded the large inwards movement characteristic in rice-deficit areas. However, Burma, discussed below, was unusual in Southeast Asia because for most of the 1940s fear coupled with food surplus in the countryside was a main determinant of population shifts to and from the principal city. Rangoon lost population at the outset of the war when repeated Japanese bombing caused a mass exodus of Indians. During the war, in-migration of Burmese fleeing an anarchic countryside and Indians searching for work helped to replace these departures but did not make up for them. After a 1945 emptying of the city before the British re-took it, Rangoon's population reached its pre-war level of 501,200 at some point in the late 1940s, and by 1950 exceeded this by over 100,000. Although Indians left Rangoon, including a net loss of 47,000 in 1949 alone, they were more than replaced by refugees. Many were fleeing civil disorders; by 1949, the government of Prime Minister U Nu controlled no part of Burma except Rangoon. Rather than return to their villages, the majority of refugees drifted into

²⁰ Dick, *Surabaya*, p. xviii.

²¹ Turley, 'Urbanizaion', pp. 370-72.

squatter settlements, tended to stay permanently, and joined Rangoon's informal economic sector.²²

Unlike cities with rice deficit hinterlands, Saigon's 1945 size of half a million was not greatly different than at the outset of the war. By 1949, however, population had swelled to 1.2 million. Fear was a major factor behind this increase; new arrivals were primarily refugees fleeing south during the First Indochina War and large parts of Saigon took on the appearance of a refugee camp.²³

Before the war, primate cities, those which are twice or more the size of a country's next biggest city, were already prominent in Southeast Asia. However, 1940s urbanization made primacy even more a Southeast Asia urban feature, except in Malaya and possibly Bangkok for which insufficient pre-war data exist. Saigon became a primate city for the first time, as Jakarta decisively did by 1951. Manila's primacy ratio widened dramatically. The million city in Southeast Asia, often associated with the 1950s, was in fact usually a product of the 1940s. A lack of data precludes certainty but by the end of the 1940s the largest city in every main Southeast Asian country except Burma probably achieved million status.

Urbanization forces: food and fear

Until 1945, the chief demographic determinant of the rapidly growing cities of Penang, Kuala Lumpur, Jakarta, Manila, Surabaya and perhaps Singapore appears to have been the pull exerted by the availability of food. Famine, although not altogether absent from the main cities in food-deficit areas, was overwhelmingly a rural phenomenon. As discussed later, famine affected Jakarta and Manila, but in neither was it a mass phenomenon and in both largely an externality attributable to population inflows from surrounding areas.

²² Cressey, *Rangoon*, pp. 5-7, 'Ecological organization', p. 166; Anderson, 'Review', p. 172.

²³ Brocheux and Hémery, *Indochina*, p. 373; Murphy, 'New capitals', p. 216.

Five principal sources of food account for the ability of main cities in food-deficit areas largely to avoid famine and to attract hinterland migrants: Japanese rationing systems; wages paid in kind by the Japanese; cultivation in urban areas and the surrounding fringes; imports both from nearby hinterlands and abroad; and, by utilizing food from the first four sources, relief efforts. Apart from relief, which generally meant feeding on the spot, black markets tied together food sources. Because black markets drew food to urban Southeast Asia and, furthermore, furnished a price mechanism that stimulated food production, they were fundamental to the attraction of the region's cities. Without black markets, wartime malnutrition in urban Southeast Asia would have been far worse.

(i) Rationing

In food-deficit Southeast Asia, rationing in urban, but generally not in rural, areas was basic to attracting in-migration. Throughout the war, rationing, although imperfect and increasingly inadequate by itself, reduced the risk of grossly inadequate nutrition by putting a floor under food availability. Rationing imperfections arose because registration systems as a basis for food allocation might not include everyone in an area or because no registration existed. Omissions particularly tended to exclude new migrants to urban areas, notably in Java.²⁴ Ration entitlements were not, however, the only way in which urban residence reduced food risk. Main cities offered numerous chances for part-time and casual employment and so a variety of possible sources of income to buy food. Such 'portfolio diversification' was far less available in rural areas.

In Malaya, Japanese rationing never operated effectively outside the larger settlements and during the latter half of 1943 ceased entirely.²⁵ By contrast, rations in

²⁴ Van der Eng, *Food supply*, pp. 35-38.

²⁵ Malaya, *Census 1947*, p. 34; Malayan Union, *British military administration*, p. 43; Kratoska, *Japanese occupation*, p. 257.

Singapore held up much better, if with progressive reductions. Immediately after occupation, in March 1942, rice rations of 12,066 grams per person per month (397 grams per day) compared not too badly with estimated daily pre-war consumption in Malaya of 499 grams[] per capita.²⁶ By February 1944, however, monthly rice rations had fallen to 158 grams per day for men and 119 grams for women, although small amounts of tapioca noodles and tapioca bread flour were also available through official channels.²⁷

Food shortages were more acute in rural than urban Java, where semi-government co-operatives distributed rice at low prices.²⁸ Over the course of the war in Java, as in Malaya, rural-urban distribution disparities widened. An 'adequate' distribution of beras (husked but uncooked rice) was considered by Javanese to be 400 grams a day per person although 1930s consumption averaged only 230 grams. By January 1945, distribution outside Java's five largest cities, chief among them Jakarta, was irregular and as little as 500 grams of beras per family per month. By contrast, those in Jakarta generally received regular distribution of beras, reported to be 180 grams per person per day.²⁹

In Surabaya, food rationing began early in the occupation and in some areas was backed up by a coupon system for the needy and soup kitchens. General rationing, even initially, provided only just enough to eat from a combination of rice supplemented with maize and soybeans. Nevertheless, food availability, and possibly also a relatively low risk of recruitment as forced labour, 'explain the rapid growth in urban population' in Surabaya.³⁰

²⁶ Malaysia, Arkib Negara [hereafter AN] 1957/0575131 Intelligence 506/30 'Appreciation of the economic position of Malaya under the Japanese', p. 3.

²⁷ National Archives, Kew [hereafter NA], WO 203/4499, 'Rice – S.E.A.C. territories', pp. 54-55 and WO 203/2647 'Summary of economic intelligence no. 130, 15 Oct, 1945', p. 5.

²⁸ Kurasawa, 'Forced Delivery', p. 59 and 'Mobilization', p. 160.

²⁹ Anderson, 'Problem', pp. 82, 90-91; Kurasawa, 'Mobilization', pp. 116, 161; van der Eng, *Food supply*, pp. 3, 8 gives pre-war Indonesian rice consumption of 350 grams per day added to which were other staple foodstuffs.

³⁰ Dick, *Surabaya*, p. 78; see also Frederick, *Visions*, p. 101.

At the outset of the Japanese occupation of Manila, a lack of food and fear of the Japanese military caused mass evacuation. Population quickly fell from its pre-war peak of 623,500 to 300,000 (table 1). The Japanese, however, soon instituted rationing in the city.³¹ Food availability and unsettled conditions in the countryside drew large numbers back to Manila. Some evacuees found that they were ill-suited to agriculture and in the Philippines, more [that] than anywhere else in Southeast Asia, widespread guerrilla resistance and dangerous rural areas discouraged more than temporary evacuation to the countryside.³² By March 1943, Manila's population had reached 940,000, over 300,000 more than before the war. In April 1944, population peaked at 1.12 million (table 1).

Large population inflows to Manila and the government's increasing inability to control rice put pressure on rations. At first, rations of 300 grams of rice compared favourably with pre-war daily rice consumption of 300 to 350 grams but by May 1944 were just 60 grams each of rice and sweet potatoes. Yet even this food availability apparently drew people to Manila, and the government tried to stem continuous cityward migration by denying rations to newcomers.³³ A proposal in May 1944 to end rations, although by then small and uncertain, was rejected for fear of social unrest.³⁴ While the government recognized the desirability of depopulating Manila, efforts to achieve this were ineffective. They were at least partly nullified by rationing and a massive relief effort, discussed below, which also included those unable to obtain rations.³⁵

The Allied offensive to re-take Manila and Japan's last ditch defence produced some of World War II's fiercest fighting and greatest urban destruction. In February 1945, when

³¹ Hartendorp, *History*, pp. 192-93; Jose, 'Food production', p. 70.

³² United States, National Archives and Records Administration [hereafter NARA] 226 16 208 "Economic Conditions in the Philippines" 13 October 1942: p. 2; Agoncillo, *Fateful years*, pp. 555-56, 565.

³³ University of the Philippines, Diliman (hereafter UPD), Manuel A. Roxas Papers,

³⁴ UPD, Japanese Occupation Papers, Cabinet Minutes, 2 Dec. 1943, p. 2; Roxas Papers, box 13, 'Memorandum on food situation', 28 May 1944.

³⁵ UPD, Roxas Papers, Roxas memo to the President, 'The rice situation' 13 May 1944, p. 3; U.S., Office of Strategic Services, *Programmes of Japan*, p. 370.

Manila fell, only some 174,000 people remained there. But encouraged by Allied-supplied food, people flooded back to the city and by 1949 its population probably topped a million (table 1).

(ii) Working for the Japanese

Continuously declining wartime rations forced urban Southeast Asians increasingly to seek other sources of food. One resort was to work for Japanese firms or the military. The incentive of payment in food, increasingly attractive as high inflation eroded relatively inflexible money wages, was, the Japanese discovered, the ‘surest method of securing a work force’.³⁶ In March 1944, food priority applied to some 70,000 Singaporeans, or over a fifth of the workforce, employed by the Navy and Japanese companies. A small minority of civilian Army employees were especially favoured with monthly rice rations of 460 grams a day. While the general ration provided near the bare minimum for survival, workers with priority rations could easily obtain 2,000 calories a day, or, perhaps more often, sell some of their ration on the black market.³⁷

In Java, the Japanese used control over stocks of basic foods and consumer goods to secure labour. Workers employed by the Japanese could buy these items at officially fixed prices. Possible gains in real wages due to much slower rises in official than market prices probably increased the recruiting success of this priority system. It was, moreover,

³⁶ Japan, National Institute for Defence Studies, Military Archives Collection [hereafter NIDS], Marei Gunsei Kanbu Chōsabu, Marei Chōshi Dai 47 Gō, *Shōnan Tokubetsu Shi Rōmu Jijō Chōsa: Hōjin Keiei Kojō wo Chūshin to shite* (A Study of the Labour Situation in Syonan Municipality Focused on Factories Managed by Japanese) Singapore, Sept. 1944, p. 16.

³⁷ NIDS, Nanpō Gunsei Sōkanbu Chōsabu, Sōchōshi Dai 35 Gō, *Shōnan Tokubetsu Shi wo Chūshin to seru Bukka Taisaku*, (Counter-measures for Prices in Shonan Municipality) Singapore, March 1944, pp. 287-88, 315-16; NIDS, Nanpō Gunsei Sōkanbu Chōsabu, Sōchōshi Dai 12 Gō, *Shōnan ni okeru Minzokubetsu Saitei Seikatsu Jittai Chōsa: Minzokubetsu Jūyō Seikatsu Hitsujuhin ni kansuru Kakaku Sūryō oyobi Hitsuju no Teido no Chōsa wo Chūshin ni shite*, (A Study of the Real State of the Lowest Living Standard of Ethnic Groups in Syonan Municipality), Oct. 1943, p. 195.

particularly attractive to the some 20% of the island's population living in the countryside but not cultivating their own food.³⁸

For many Singaporeans, rice became an 'infallible draw. People who hated the Japanese had eventually to submit because of rice ... many women and girls of poor families succumbed to necessity and became Japanese mistresses because of rice'.³⁹ In the Philippines, divorce was legalized for the first time partly owing to an upsurge in prostitution by married women attempting to feed their families.⁴⁰ Large numbers of Javanese worked voluntarily for the Japanese as *romusha* (unskilled manual labourers) to get food. Including these workers and other, forced-labour *romusha*, the Japanese provided rice for some 2.6m Javanese.⁴¹

(iii) Urban cultivation and squatter settlements

Growing food, both in central urban areas and on land adjacent to cities, was a third food source. The cultivation of root crops like tapioca and sweet potatoes increased the calorific, though typically not the nutritional, benefit per unit of land. Japanese administrators strongly promoted grow-your-own food campaigns and the dissemination of information on the preparation of unfamiliar foodstuffs.⁴²

Home gardens helped people to stay in Manila, and urban cultivation increased after a day's labour every week in community gardens became compulsory.⁴³ By 1943 in Kuala Lumpur, every scrap of spare urban land was planted; Health Department staff were sent to

³⁸ Centraal Bureau voor de Statistiek, 'De economische toestand van Nederlandsch-Indie tijdens de Japanse bezetting, 1942-45' (The Economic Situation of the Dutch Indies during the Japanese Occupation 1942-45) *Statistische en Econometrische Onderzoekingen* 2, 4 (1947), p. 124.

³⁹ Chin, *Malaya upside down*, p. 60.

⁴⁰ Agoncillo, *Fateful years*, p. 589-90.

⁴¹ van der Eng, *Food supply*, p. 37; Kurasawa, 'Mobilization', p. 156; Sato, *War*, p. 33.

⁴² NIDS, Marei Gunsei Kanbu Chōsabu, Marei Chōshi Dai 44 Gō, *Shōnan tō nai Shokuryō Zōsan Saku ni tsuite* (Policy for Increasing Food Production in Singapore Island), October 1944.

⁴³ NARA 226 16 144 'Conditions in the Philippine Islands since the Japanese Occupation' 23 Aug. 1942, pp. 38-39; Hartendorp, *History*, p. 133.

cultivate land at the Golf Club.⁴⁴ Singapore municipality offered limited scope for cultivation, although some residents kept chickens and ducks which they fed on the city's two-inch cockroaches trapped in the sewers at night.⁴⁵ Additionally, the area in Singapore under market gardens expanded from 1,500 acres to 7,000 acres. That was, however, just 0.021 of an acre for each of the 263,600 additions to the city's population between 1938 and 1944.⁴⁶ Urban cats and dogs afforded an obvious source of high protein. In Singapore, these animals disappeared in sufficiently great numbers to qualify as endangered species.⁴⁷ The 1946 Malayan Union Medical Department Report laconically observed that 'food was very scarce and no dogs were to be seen'.⁴⁸ Manila residents referred to dog meat as *azucena*, a species of flower, the first two syllables of which sounded like the Tagalog word *aso*, dog.⁴⁹

World War II gave impetus to squatter settlements. These continued to spread rapidly immediately after the war and soon re-configured Southeast Asia's urban geography. During the war, in Kuala Lumpur and possibly Penang, large squatter settlements appeared for the first time on urban fringes. By 1942, as part of the utilization of almost all vacant land in and around Kuala Lumpur for food production, unauthorised, temporary buildings 'sprang up like mushrooms' in both the city and its outskirts.⁵⁰ Between 1941 and 1947, the near doubling of population on Penang island but much less expansion in the old urban core of Georgetown suggests the growth of squatter communities. Easy access to central urban districts for squatters looking to sell surplus market garden production helps to explain inwards migration

⁴⁴ AN, 1957/0292074 R.C. Selangor 296/1947, Malayan Union, *Medical Department Report, 1941-1946*, p. 14. And see Malayan Union, *Medical Department Report, 1946*, p. 8.

⁴⁵ National Archives of Singapore [hereafter NAS] Oral History, Interview with Lee Tian Soo; Singapore Department of Social Welfare, *Social survey*, p. 24..

⁴⁶ AN, 1957/0572056 CA (MPU) War Office M.G.D. AGM/22, O. W. Gilmour, 'Assessment of war damage' 15 April 1944, p. 5.

⁴⁷ He Wen-Lit, *Syonan Interlude*, p. 156.

⁴⁸ AN, 1957/0292074 R.C. Selangor 296/1947, Malayan Union, *Medical Department Report, 1941-1946*, p. 17. And see AN, 1957/0292046, R.C. Selangor 269/1947, *Kuala Lumpur Town Board Report, 1946*, p. 6.

⁴⁹ Agoncillo, *Fateful years*, p. 585.

⁵⁰ AN, 1957/0290027 Syuseityo Kanbo 108/2603 *Kuala Lumpur Sanitary Board Report 2062 (1942)*, pp. 12, 15. See also, Malayan Union, *Medical Department Report, 1946*, p. 30.

from rural Southeast Asia, and perhaps also, as in Kuala Lumpur, some outwards movement to urban fringes.⁵¹

Squatter settlements almost certainly expanded in Jakarta due to the large inflow of unemployed landless labourers. From near the end of the war in Manila, many squatters occupied the bomb-damaged Intramuros area in the city's inner core.⁵² Just after the war, in Singapore, Rangoon, Hanoi and Saigon, squatter settlements became a prominent urban feature.⁵³

Squatter cultivation and urban gardening were, however, a supplementary food source, not a replacement. For peninsular Malaya, Paul Kratoska shows that, compared to a pre-war calorie intake of 2,500 from all foods, in 1945 production of root crops, bananas, maize, ragi, groundnuts and sugar provided an average of 520 calories per person per day.⁵⁴ Although an option to obtain additional food, this, on its own, would still have been far short of subsistence. These figures suggest a relatively low benefit from root crops and so a reason to migrate to cities rather than for city folk to move to rural areas and attempt cultivation. So too, does the example of Malaya's Indian estate labourers. They had access to abundant land, but not to the credit, tools and technical knowledge fundamental to successful subsistence agriculture, and ended the war as easily Malaya's most nutritionally deprived group.⁵⁵ Although almost certainly gardening in urban Southeast Asian cities yielded fewer calories than the 520 Kratoska cites, cities offered other opportunities to obtain food and this was a key attraction.

(iv) Food imports

⁵¹ Sandhu, 'Saga', pp. 145-149. On Kuala Lumpur's large increase in unsanitary, unauthorized dwellings see AN, 1957/0292046, R.C. Selangor 269/1947, *Kuala Lumpur Town Board Report, 1946*, p. 36.

⁵² McGee, *Southeast Asian city*, pp. 144, 157-58.

⁵³ Gilmour, *With freedom*, p. 112.

⁵⁴ Kratoska, *Japanese occupation*, p. 266.

⁵⁵ MacGregor, *Medical history*, p. 162.

Against a backdrop of falling rice production due to low, largely inflexible government-controlled prices, geography, transport availability and corruption are fundamental in explaining the varying abilities of rice-deficit cities to import food. At the start of the war, Manila, if occupied, was not expected to encounter serious food deficits.⁵⁶ Domestic production supplied the 72% of its rice-eating population with an average of 341 grams per day.⁵⁷ Normally, rice-surplus central Luzon sent 125,000 metric tons of rice a year to Manila and other parts of the islands.⁵⁸ However, the destruction by departing American forces of large numbers of vehicles and most gasoline stocks made transporting food to Manila an immediate problem.⁵⁹ At the same time, widespread guerrilla activity in rural areas discouraged cultivation.⁶⁰ In May 1942, one could travel for miles outside Manila without seeing a cultivated field.⁶¹ Moreover, Japanese military control of transport and fuel shortages left intra- and inter-island food transport increasingly dependent on non-mechanized transport. José P. Laurel's nominally independent Philippines government, established in October 1943, often struggled to secure railway wagons to carry food to Manila. However, when the government, and even the Japanese Army FCA, could not get wagons, some Chinese could still obtain this transport for their private purchases.⁶²

Laurel's government, like its predecessor Japanese military administration, bought and distributed rice through monopoly organizations. However, by December 1943, two months after Laurel assumed office, his government could supply Manila with rice for only two days and with palay for five.⁶³ During the war, a significant share, and perhaps as much as a quarter, of what rice the government could purchase in the provinces[,] was lost.

⁵⁶ U.S., Office of Strategic Services, *Philippine agriculture*, pp. 18, 35-36.

⁵⁷ Sacay, 'Food supply', p. 204.

⁵⁸ Hainsworth and Mayer, *Agricultural geography*, p. 31.

⁵⁹ NARA 226 16 208 'Economic conditions in the Philippines' (13 Oct. 1942), pp. 2, 8-11.

⁶⁰ Buencamino, 'Manila', pp. 15, 16, 25, 28.

⁶¹ Hartendorp, *Japanese occupation*, p. 205

⁶² UPD, Roxas Papers, box 11, Minutes Economic Planning Board, 27 June 1944, p. 2.

⁶³ UPD, Japanese Occupation Papers, Cabinet Minutes, 2 Dec. 1943, p. 2.

Organized gangs derailed trains and waylaid lorries carrying rice. Many provincial governors, in connivance with municipal mayors, oversaw the trafficking of black market rice. In Bulacan, some towns ‘acquired the typical boom town atmosphere’ as centres for the black market operators who derailed and then held up trains carrying rice.⁶⁴ Although the black market’s ‘big offenders’ were those with political connections, small operators played a part.⁶⁵ When rice reached Manila, sacks of grain were slashed open by men and boys with special cutting tools so that rice spilled onto the streets. Thieves short-circuited electric wire strung around the trucks to protect rice cargoes. Once in warehouses, rice mysteriously disappeared.⁶⁶

The Japanese appear not to have imported much rice for Manila. Its distance from Southeast Asia’s rice-surplus countries would have taxed Japan’s already acute shortage of merchant shipping. The problems of Manila’s geography and Japanese shipping shortages were soon further compounded as the Japanese Navy progressively surrendered control of the high seas.

It might be thought that location in a country with such a great rice deficit as Malaya’s would make famine in Singapore nearly inevitable. However, the island’s overriding geographical feature, its centrality in Southeast Asia, which contrasted sharply with Manila’s isolation in the region, helped to keep famine at bay. Geography facilitated the transport by coastal shipping of rice and other foodstuffs from Thailand, Indonesia and the Malay Peninsula. In 1944, as discussed below, the Japanese decision to permit a partial free market in rice further enabled Singapore to utilize unknown, but almost certainly substantial, rice supplies from nearby Southeast Asia.

⁶⁴ UPD, Japanese Occupation Papers, Cabinet Minutes, Feb. 1944, p. 229; Nov. 1943, p. 3.

⁶⁵ UPD, Roxas Papers, box 44, Conference Colonel Utunomiya, Secretary Sabido and Mr. Sanvictores, 5 June 1944. The speaker was Utunomiya.

⁶⁶ UPD, Roxas Papers, box 4, A. V. Tanco, memo to Board of Directors, Bigasang Bayan, ‘Rice and camote distribution’, 17 April 1944; Tango to Vice-Minister of Economic Affairs, Leon Ma. Gonzales, 24 Oct. 1944.

(v) Relief efforts

All Southeast Asia's main cities had relief schemes. The most extensive seems to have been Manila's, perhaps because, discussed below, the city relied so heavily on black market food which not everyone could afford, because of a greater sense of social responsibility possible for an independent compared to a military government, and because of a strong Catholic charitable tradition. The Red Cross and other private charities operated from early in the war. By February 1943, many of the some 25% of those unemployed in Manila depended on charity, while others relied on relief.⁶⁷ In December 1943, the Laurel government established community kitchens. They were supplied with whatever rice the government had and in May 1944 provided meals of 120 grams of rice to be eaten on the premises.⁶⁸ Apparently, whenever possible labourers and poorer classes sent their children to eat in the community kitchens.⁶⁹ By January 1945, just before Allied re-occupation, Manila had 17 welfare stations, 94 community kitchens and 240,000 people, nearly a quarter of the population, received direct relief.⁷⁰

(vi) Black markets

In food-deficit areas, black markets had a major role in urban food provision and, as explored below, probably also in preventing mass urban starvation. Black market food, essential in feeding much of World War II occupied Europe, may have had an even greater importance in Southeast Asia.⁷¹ Large and growing urban black markets were inevitable, because of drastic falls in the availability of food and goods, government insistence in setting official prices far below market-clearing levels, faltering rationing systems, and wholesale monetary expansion.

⁶⁷ U.S., Office of Strategic Services, *Manpower in Japan*, vol. 2, p. 310.

⁶⁸ UPD, Roxas Papers, box 11, Minutes Economic Planning Board, 12 July 1944, p. 2; box 13 memo Jose G. Sanvictores, Food Administrator to President, 25 May 1944, p. 1.

⁶⁹ UPD, Roxas Papers, box 44, undated 'Questionnaires'.

⁷⁰ NA, FO371/446353, 'Far Eastern survey', p. 24.

⁷¹ League of Nations, *World economic survey, 1942/44*, pp. 125, 129.

Price controls comprehensively failed; even the Japanese often had to buy goods, and sometimes food, on the black market. In Manila, the *Tribune* published official food prices. However, purchasers who cited these were rudely advised to go to the newspaper's office to buy; 'Tribune price' came into vogue in Manila as a derisive term. Inexorably rising prices were not halted by a 'profiteers cage' in central Manila or by various public displays, including scores of offenders being roped together and paraded through the streets.⁷²

While the Laurel government always achieved a semblance of food equilibrium in Manila through heavy reliance on the black market, this dependence deepened in April 1944 with a plan that allowed those with rice to sell 40% of it freely in Manila if they sold 60% to the government.⁷³ However, the government buying agency, Bigasang Bayan (National Rice Granary), never got anything close to a 60% share. Rather, as a provincial inspector reported, 'since the day rice was allowed free entry to Manila, the black market has operated full blast'. Farmers 'thrilled' to high rice prices, and by July 1944 some, who had sold mainly on the black market, 'are now residing in Manila in their newly bought high-priced houses'. That, however, left an indigent population in Manila for the government to try to feed, and others in the provinces short of food.⁷⁴

Jakarta was the destination for heavy black market trafficking of rice organized through networks of smugglers. Attracted by prices some ten times above village levels, rice smugglers relied on bribes and luck to circumvent legal prohibitions and the threat of severe penalties, even death, if apprehended with black market cargoes. Large holders of rice land preferred to channel supplies to Jakarta and a quarter to a third of milled (as opposed to smallholder pounded) rice was said to go to the black market in cities, chiefly Jakarta, where

⁷² Agoncillo, *Fateful years*, pp. 537-39; Hartenthorp, *History*, p. 84

⁷³ UPD, Roxas Papers, memo 'New rice policy', 28 April 1944.

⁷⁴ UPD, Roxas Papers, box 4, Seledonio R. Maglaya, 'Campaign for the purchase of palay', 28 July 1944, p. 1.

it was sold mainly by Chinese shopkeepers. The diversion of grain to the urban black market and falling output created rice shortages in the countryside.⁷⁵

Penang had a thriving black market in all basic foodstuffs.⁷⁶ Throughout Malaya, black market food was ‘crucial’ in maintaining the health and welfare of the population.⁷⁷ It had a large role in Singapore due a restricted ability to produce food on the island. Singapore was not affected by famine because the city offered substantial black market opportunities; because of Singapore’s advantageous geography; because the pre-war commercial relationships between Singapore traders and their counterparts in surrounding countries facilitated exchange; and because of the partial freeing of the rice market late in the war.⁷⁸

During the war, most Singapore Chinese firms continued to trade and many prospered.⁷⁹ This commercial network and the port’s central location in Southeast Asia facilitated the clandestine transport of rice and other foodstuffs from nearby areas to Singapore, while the city’s pre-war stocks of gold and other tangible wealth provided readily accepted means of payment.⁸⁰ In October 1944, the Japanese authorities devised a plan, somewhat like that in Manila, which both acknowledged the black market’s importance and aimed at helping them to secure rice. The plan allowed a group of Singapore rice merchants, as the Syonan Rice Import Association, freely to import rice from Songkhla in Thailand so long as they also sold some rice (at below free market prices) to the Japanese authorities.⁸¹

Shipping space for the transport of rice was always a Japanese concern, but Singaporeans

⁷⁵ Kurasawa, ‘Mobilization’, pp. 133-34, 148, 164-65; Sato, *War*, pp.132-135, 143.

⁷⁶ Kratoska, ‘War’.

⁷⁷ Kratoska, *Japanese occupation*, p. 169 and see p. 248.

⁷⁸ NIDS, Shochoshi Dai 35 Go, Syonan Tokubetsu Shi wo Chushin to seru Bukka Taisaku (Counter-measures for Prices) , pp. 277-79, 281-82, 287-288, 297-298, 303, 309 -10.

⁷⁹ NAS, Oral History Department, interview Chew Choo Keng.

⁸⁰ Chin, *Malaya upside down*, p. 59.

⁸¹ NIDS, Marei Gunsei Kanbu Chōsabu, Marei Chōshi Dai 51 Gō, *Marei Tokuni Shōnan Tokubetsu Shi no Beikoku Yunyū* (Rice Imports in Malaya Especially in Syonan Municipality), Oct. 1944.

responded to the new trade opportunities with a flurry of boat building. Wartime possession of a junk, a Singapore trader recalled, was 'like owning six ships during peace time'.⁸²

Black markets allowed Southeast Asia's middle class to buy food by selling jewellery, gold, furniture and other tangible assets. In Singapore, one set of dealers trading in jewellery and property, who operated mainly in the High Street or Chulia Street off Raffles Place, bought from a middle class 'parting with family heirlooms in order to stay alive'. Other dealers purchased these goods to sell to Japanese civilians or as presents for Japanese military officers who handed out contracts.⁸³ A similar, active jewellery mart grew up in Manila's Azcárraga Street between Rizal Avenue and San Bernardo. In the Philippines, a significant transfer of wealth from urban to rural areas occurred through disposals of furniture, jewellery and clothes to buy rice.⁸⁴

Two vital, much wider functions than middle class survival were, however, performed by black markets. Both helped a range of urban consumers to obtain food. One was, in the absence of well-functioning markets, to draw food to cities by compensating for the effort of producing food, and the risk and danger of transporting it illegally from surrounding areas. The more food that black markets drew into cities the lower was its price there.

Second, black markets and a burgeoning informal economy provided new jobs and some employment that replaced work unavailable since the outbreak of the war. In Jakarta, as in other cities, the informal sector's elastic quality allowed the accommodation of a large increase in street vendors and sellers of items like empty bottles and old clothes.⁸⁵ New to Jakarta's informal sector were itinerant traders drawn to *cha-tu*[,] or blackmarketeering.

⁸² NAS, Oral History Department interview Jack Kim Boon Ng.

⁸³ Lee, *Singapore story*, p. 66.

⁸⁴ Jose, 'Rice shortage', p.212.

⁸⁵ See, for example, NIDS, Nanpō Gunsei Sōkanbu Chōsabū, Sōchōshi Dai 26 Gō, *Shōnan Tokubetsu Shi no Shokugyōbestu Jinkō* (A Population Survey of Syonan Municipality According to Occupations), Dec. 1943, p. 354.

These Jakarta and Surabaya Chinese often relied on supplies from other Chinese, usually Hokchia or Hinhua, engaged in smuggling known as overland *danbang*. Responsive to arbitrage profits averaging 300%, smugglers travelled by train or along Java's back roads, riding or pushing bicycles carrying tens of kilograms of goods.⁸⁶ A government minister complained that at Manila's Tutuban railway station 'passengers arriving from the provinces and bringing rice to Manila [estimated as 309,000 lbs. daily] have literally converted the station into a market by selling the cereal right on the premises'.⁸⁷

The economics of shortage, imperfect information and uncertainty about whom to trust swelled the informal economy. Multiple layers of agents, brokers and dealers appeared, along with their many subordinates and runners. In Manila, the Crystal Arcade Building, formerly home to the stock exchange, became a centre for the 'buy and sell' business in second-hand and stolen goods. Sergio Osmeña Jr., a leading buy and sell merchant and son of a prominent politician, recalled from prison soon after the war how 'thousands of agents, sub-agents and brokers cluttered and crowded the [Crystal Arcade] lobby daily'. Nearly all the buildings on the Escolta (centre for pre-war finance and fashion) and neighbouring streets were converted to 'buy and sell' offices.⁸⁸ Those, like Osmeña, who supplied the Japanese, relied on bribes of goods and favours but most people trading illegally dealt only with known and trusted people because of the risk of informers.

A few black market kings, Singapore's 'mushroom millionaires', became rich, if at first perhaps mainly in Japanese paper money. So too, did some Manila 'buy and sell' merchants, probably most famously F. C. De La Rama who started as a boxing promoter and, usefully for Japanese military contacts, managed a troop of chorus girls.⁸⁹ Profits frequently

⁸⁶ Twang, *Chinese business elite*, pp. 100-4.

⁸⁷ UPD, Japanese Occupation Papers, Cabinet Minutes, 2 Dec. 1943, p. 1.

⁸⁸ Osmeña, *Dear dad*, p. 115.

⁸⁹ De La Rama, *I made millions*.

went partly to Japanese officials, but also filtered down into local communities through those employed by men like De La Rama and the numerous similar, smaller operators.⁹⁰

Lower down the social scale, for many unemployed, older or less able-bodied Southeast Asians, chronic shortages made queue-standing a recognized 'profession'. In urban Malaya, for those lacking other work, queuing and the sale of rationed goods at enhanced prices was 'always a possible source of livelihood'.⁹¹ Large numbers of Singapore's pre-war household servants left this employment because 'they could earn much more by joining the 'queues' for cigarettes, for fish, for meat'. When successful, 'the proceeds of the long wait could be disposed of at ten times the sum paid'.⁹² In Manila, the uncertainties of rationing, and no doubt sometimes black market re-sale, made long lines common. Filipino humour cast Manila residents as no longer 'Plipinas' but 'Pilapinas', 'pila' meaning queue.⁹³

Hanoi: fear and famine

As a city that lost population, despite being surrounded by a food-deficit countryside, Hanoi was atypical. The dominance of fear, not food, appears principally to explain the drop in Hanoi's population from 149,000 in 1936 to 119,700 by 1943 (table 1). Unlike the other main cities with adjoining food-deficit hinterlands, Hanoi and its port of Haiphong were principal targets for Allied air attacks.⁹⁴ As early as 1942, bombing by aircraft based in China damaged Hanoi and Haiphong.⁹⁵ An intensification of air raids left Hanoi, along with

⁹⁰ NIDS, Malay Choshi Dai 44 Go, *Syonan to nai Shokuryo Zousan Saku ni tsuite* (Policy for Increasing Food Production in Singapore Island), pp. 131, 139; Kurasawa, 'Mobilization', p. 151; Kratoska, *Japanese occupation*, pp. 169-74.

⁹¹ Malaya, *Census 1947*, p. 34

⁹² Low, *When Singapore*, p. 63; Low and Cheng, *This Singapore*, pp. 127-28.

⁹³ Jose, 'Rice shortage', p. 212; Agoncillo, *Fateful years*, p. 551-52.

⁹⁴ Gunn, 'Great Vietnamese famine', p. 9; Andrus, *Basic problems*, p. 35.

⁹⁵ LHC, MAGIC, 'Hanoi', 17 August 1942, p. 2.

Haiphong and Nam Dinh, ‘partially deserted’.⁹⁶ Fear figured even more prominently when, beginning in December 1946, population fell to possibly only 10,000. People left Hanoi because of insecurity caused by fighting in the First Indochina War, although also because the 1944-1945 famine and French encirclement blocking access to agricultural areas had deprived the city of grain reserves.⁹⁷

Despite continued bombing, food outweighed fear during the 1944-1945 Tonkin and Annam famine: it gave rise to a seemingly unending stream of famine victims who clogged the roads to Hanoi. While consistent with large cityward migration in food-deficit areas, how far these famine inflows helped to maintain population is unclear. Barricades at entrances to Hanoi and other cities erected by the French colonial administration were abandoned after the 9 March 1945 Japanese coup and installation of a Vietnamese puppet government.⁹⁸ Refugees poured into Hanoi, described as ‘more corpses, yet more corpses’ dragging themselves towards the city.⁹⁹ There and in other large cities ‘tens of thousands of rural folk [wandered] the streets, begging pitifully, often clad in nothing but straw matting’.¹⁰⁰ Many probably died soon after arrival. For Hanoi residents, the famine dead became an accustomed sight; ‘50 to 70 corpses crouching along the pavement’ were picked up daily.¹⁰¹ In June 1945, when famine deaths were estimated at between 100 and 200 a day, corpses were buried by the hundred in shallow pits of about two metres square in Hanoi’s Hop Thien Cemetery. The pits, covering an area of about two mẫu (7,000 sq metres), emitted a stench that hung over parts of the city.¹⁰² High famine deaths among Hanoi’s inwards migrants are likely[,]

⁹⁶ Andrus, *Basic problems*, p.29.

⁹⁷ Turley, ‘Urbanization’, pp. 370-71.

⁹⁸ Hung, *Impact*, p. 256.

⁹⁹ Bàng Bá Lân, ‘They starved’, p. 105.

¹⁰⁰ Marr, *Vietnam 1945*, p. 101.

¹⁰¹ Nguyễn, ‘Japanese Food Policies’, p. 218:

¹⁰² France, Centre des Archives d’Outre-Mer, Aix-en-Provence (AOM), INDO GF//58 Nishimura, Délégation Impériale au Tonkin to Mayor of Hanoi 26 June 1945 and reply from the Mayor 9 July 1945.

since the French authorities made little attempt to provide relief and the Japanese, after their coup, even less effort to alleviate famine.¹⁰³

Food surplus cities: Rangoon, Bangkok and Saigon

In Rangoon, Bangkok and Saigon, the constituents of Southeast Asia's other principal urbanization pattern, wartime population movements probably primarily reflected fear, since an abundance of rice, which made food a secondary concern, also led to sharp falls in its real price. Although imported, non-basic foods might be unobtainable or expensive, they were not to be found in the countryside.

Rangoon's three main wartime population movements can be explained principally as a search for safety. U Sein Tin's diary, written during the war, describes Indian labourers leaving Rangoon just after bombing started on 23 December 1941, an attack followed by bombing on Christmas Day which killed over 2,000 people. About 70,000 managed to depart by sea[,] but most aimed to walk the about 250 miles to India over some of the roughest track in existence.¹⁰⁴ Between late December 1941 and mid-1942, 400,000 to 450,000 Indians left Burma.¹⁰⁵ Departures even included school boys in short pants hoping to reach India on their bicycles and also a number of Europeans.¹⁰⁶ Estimates of Indian deaths on Burma's 'forgotten long march' extend upwards to 100,000, but the likely range is between 10,000 and 50,000.¹⁰⁷ The dead, often unburied, marked the difficult points along the route where, sometimes as couples, mothers with infants, or in family groups, they had lain down by the side of mountain paths to die.¹⁰⁸ Because Indians made up half of Rangoon's pre-war population and the city's Indian residents accounted for most of those leaving Burma, their

¹⁰³ Hung, *Impact*, p. 254.

¹⁰⁴ U Sein Tin, *Wartime*, pp. 12, 20; Christian, *Burma*, p. 114; Collis, *First*, p. 20.

¹⁰⁵ Tinker, 'Forgotten long march', pp. 1-4. Burma Intelligence Bureau, *Burma*, vol. 2, p. 184 estimates 500,000 departures.

¹⁰⁶ U Sein Tin, *Wartime*, p. 140.

¹⁰⁷ Tinker, 'Forgotten long march', pp. 1-4.

¹⁰⁸ Allen, *Burma*, pp. 80-90.

exodus largely explains a drop in population from half a million before the war to 300,000 in September 1942 (table 1).

A second, reverse flow, that by March 1943 caused population to increase to some 400,000, began as Burmese and Indians moved back to Rangoon. Many Burmese returned because danger in the countryside outweighed that in the city, despite regular air raids. U Nu remembered Burmese in rural areas being bullied by the military police; ‘those who escaped their clutches came streaming into Rangoon’.¹⁰⁹ However, the city itself was unsafe in the lawless early occupation climate of violence, robbery and looting, in which U Sein Tin’s diary records, ‘the country folk ... robbing the townspeople, and the townspeople ... robbing each other’.¹¹⁰ Coming to Rangoon, U Nu later remembered, ‘was like dodging a snake and treading on a scorpion’.¹¹¹ In early post-occupation Rangoon, hundreds of bazaars appeared selling ‘all stolen property’.¹¹² As well as those seeking Rangoon’s comparative safety, Indians migrated to the city. The Japanese encouraged the about half of Burma’s pre-war Indian population still in the country to come to Rangoon as labourers, and by the end of 1943 former agricultural workers were flocking to towns and labour camps to find work.¹¹³

Third, by the time the Allies re-occupied Rangoon in May 1945, perhaps no more than 100,000 residents remained. Few if any urban services, including street lighting, still functioned.¹¹⁴ Nor were surrounding areas safe. Throughout the Delta, as Japanese forces retreated thousands of people walked into the towns and looted.

¹⁰⁹ U Nu, *Burma*, p. 35.

¹¹⁰ U Sein Tin, *Wartime*, p. 108.

¹¹¹ U Nu, *Burma*, p. 35.

¹¹² Pe, *Narrative*, p. 11.

¹¹³ Burma Intelligence Bureau, *Burma*, vol. 1, pp. 48-49, vol. 2, p. 114.

¹¹⁴ Burma Intelligence Bureau, *Burma*, vol. 2, pp. 120-132

Evacuation from Rangoon was, however, temporary. After Allied re-occupation and the restoration of some order, the city again filled up.¹¹⁵ Most new arrivals, as indicated above, were Burmese who, fearful of remaining in the countryside, settled in the city as squatters. Their arrival and the ongoing departure of Indians turned Rangoon from an Indian into a Burmese city — the principal instance of a war-induced change in urban racial composition.

Bangkok and Saigon were much less affected than Rangoon by the war. In Bangkok, shortages of medicines, tyres, petrol and fuel oil increasingly developed. But in city and countryside alike plentiful supplies of rice and most other basic foods gave no motive for rural-urban migration. During the war's latter stages, however, fear is said to have caused population to fluctuate. Some 12 bombing raids in May 1944 sufficiently unnerved Bangkok residents that an estimated 60% of the population vacated the centre in favour of the suburbs.¹¹⁶ A journalist writing at the time recorded that an air of crisis heightened after bombs on 4 April 1945 left the city without electricity for the rest of the war and further intensified when, in July, Bangkok's newspapers began to be printed on straw paper.¹¹⁷

Saigon enjoyed a war-induced boom until late 1942.¹¹⁸ Increasingly, however, Saigon, like Hanoi, became a principal Allied target and intensive bombing drove residents from the city. By 1944, many of Saigon's workers had sought safety in the countryside, and the difficulty that the Japanese had in finding replacements left them heavily dependent on recruiting from the religious sect of the Cao Đài to supply a workforce.¹¹⁹ Data are lacking, but it seems unlikely that these recruits fully offset departures from Saigon-Cholon.

¹¹⁵ Pe, *Narrative*, p. 95:

¹¹⁶ Reynolds, *Thailand*, pp. 171, 174, 204.

¹¹⁷ Prem Chaya, *Passing hours*, pp. 3, 17-18, 60-61, 79, 90.

¹¹⁸ Anon, 'La hausse', p. 34; Le Manh Hung, *Impact*, p. 248.

¹¹⁹ Tran, 'Working', p. 291.

Concluding Remarks

The 1940s — modern Southeast Asia’s most turbulent decade — brought fundamental change. By looking at urbanization during the 1940s, this paper helps to fill a gap in a decade ignored by most historians and yet key to Southeast Asian history. The region’s main cities have been seen as places that people fled during World War II owing to food shortages. Partly because of this, it is often not appreciated that in most of Southeast Asia the war and its aftermath was a time of rapid urbanization and the emergence of truly large cities.

A World War II breakpoint reversing decades of continuous pre-war urbanization could have been expected if, as has been suggested, a search for food security drove urban populations to the countryside to take up subsistence cultivation. However, where food was scarce the pattern was substantial population movements to main cities. People voted with their feet for urban residence because of a greater likelihood of getting at least some food through rationing, relief efforts, recourse to large black markets, and enhanced chances of employment. Even in the food-surplus cities of Rangoon, Bangkok and Saigon-Cholon, where a search for safety was a principal determinant of rural-urban movements, evacuations were temporary.

Rapid 1940s urbanization led to fundamental alteration in the geography of settlement. Along with the wartime dislocation that encouraged rural migration, large squatter communities first appeared in the main Southeast Asian cities. Migrant inflows almost certainly promoted yet more migration by making large cities feel less ‘alien’ to new arrivals from nearby areas. At the same time, the proliferation of squatter settlements gave a new ease to urban settlement. Both of these changes during the 1940s contributed importantly to the continued upsurge in migration that fed further rapid Southeast Asian urbanization after 1950.

Footnote references

- Abeyasekere, Susan, *Jakarta: A history* (Singapore: Oxford University Press, 1989).
- Agoncillo, Teodoro A. *The fateful years: Japan's adventure in the Philippines, 1941-45*, two vols. (Quezon City: R. P. Garcia Publishing Company, 1965).
- Allen, Louis, *Singapore 1941-1942* (London: Davis-Poynter, 1977).
- Allen, Louis, *Burma: the longest war 1941-45* (London: J. M. Dent & Sons, 1984).
- Anderson, Benedict, 'The problem of rice [Stenographic notes on the fourth session of the Sanyo Kaigi, January 8, 1945]', Translated with an introduction by Benedict Anderson, *Indonesia*, 2 (1966), pp. 77-123.
- Anderson, Benedict, 'Review of South-East Asia from colonialism to independence by Jan Pluvier', *Journal of Asian Studies* 35, 1 (1975), pp. 171-73.
- Andrus, J. Russell, *Basic problems of relief, rehabilitation and reconstruction in South-East Asia* (New Delhi: Indian Council of World Affairs, 1946).
- Andrus, J. Russell, *Burmese economic life* (Stanford: Stanford University Press, 1948).
- Bàng Bá Lân, 'They starved, they starved', *Vietnam Forum*, no. 5 (1985), pp. 101-7.
- Barro, Robert J. and José F. Ursúa, *Macroeconomic crises since 1870*, NBER Working Paper 13940 (Cambridge: NBER, 2008).
- Booth, Anne, *The Indonesian economy in the nineteenth and twentieth centuries* (London: Macmillan, 1998).
- Buencamino, Victor, 'Manila under Japanese occupation (Jan. 1-April 30, 1942)', *Bulletin of the American Historical Collection* 7, 3 and 4 (1979), pp. 7-29.
- Brocheux, Pierre and Daniel Hémerly, *Indochina: an ambiguous colonization 1858-1954* (Berkeley: University of California Press, 2009).
- Chin Kee Onn, *Malaya upside down* (Singapore: Jitts & Co., 1946).
- Christian, John L., *Burma* (London: Collins, 1945).
- Collingham, Lizzie, *The taste of war: World War II and the battle for food* (London: Allen Lane, 2011).
- Collis, Maurice, *Last and first in Burma (1941-1948)*, (London: Faber and Faber, 1956).
- Cressey, Paul F., *Rangoon: a brief social survey* (Rangoon: Rangoon Gazette, 1950).
- Cressey, Paul F., 'The ecological organization of Rangoon, Burma', *Sociology and Social Research* 40, 3 (1956), pp. 166-69.
- De Vries, E., 'Vital statistics under Japanese rule', *Economic Review of Indonesia*, 1, 1 (1947), pp. 18-19.
- Dick, Howard, *Surabaya, city of work: a socioeconomic history, 1900-2000* (Athens: Ohio University Press, 2002).
- Dick, Howard and Peter J. Rimmer, *Cities, transport and communications: the integration of Southeast Asia since 1850* (Basingstoke: Palgrave Macmillan, 2003).
- Friend, Theodore, *The blue-eyed enemy: Japan against the West in Java and Luzon, 1942-1945* (Princeton: Princeton University Press, 1988).
- Fryer, D. W., 'The million city in Southeast Asia', *Geographical Review* 43, 4 (1953), pp. 474-94.
- Frederick, William H., *Visions and heat: the making of the Indonesian revolution* (Athens: Ohio University Press, 1989).
- Garcia, Mauro, *Documents on the Japanese occupation of the Philippines* (Manila: Philippine Historical Association, 1965).
- Gilmour, O. W., *With freedom to Singapore* (London: Ernest Benn, 1950).
- Goscha, Christopher E., 'Colonial Hanoi and Saigon at war: social dynamics of the Viet Minh's "underground city", 1945-1954', *War in History* 20, 2 (2013), pp. 222-50.
- Gunn, Geoffrey, 'The great Vietnamese famine of 1944-45 revisited', *Asia-Pacific Journal* 9,

- 5/4 (2011). Online: <http://www.japanfocus.org/-Geoffrey-Gunn/3483>
- Hainsworth, Reginald G. and Raymond T. Moyer, *Agricultural geography of the Philippine Islands* (Washington, DC: United States Department of Agriculture, Office of Foreign Agricultural Relations, 1945).
- Harper, T. N., *The end of empire and the making of Malaya* (Cambridge: Cambridge University Press, 1999).
- Hartendorp, A. V. H., *History of industry and trade of the Philippines* (Manila: American Chamber of Commerce of the Philippines, 1958).
- Hartendorp, A. V. H., *The Japanese Occupation of the Philippines*, 2 vols. (Manila: Bookmark, 1967).
- He Wen-Lit, *Syonan interlude* (Singapore: Mandarin Paperbacks, 1991).
- Huff, Gregg, *The economic growth of Singapore: trade and development in the twentieth century* (Cambridge: Cambridge University Press, 1994).
- Huff, Gregg, 'Export-led Growth, Gateway Cities and Urban Systems Development in Pre-World War II Southeast Asia', *Journal of Development Studies*, 48, 10 (2012), pp. 1431-52.
- Huff, Gregg and Luis Angles, 'Globalization, Industrialization and Urbanization in Pre-World War II Southeast Asia', *Explorations in Economic History*, 48, 1 (2011), pp. 20-36.
- Huff, Gregg and Shinobu Majima, 'Financing Japan's World War II Occupation of Southeast Asia', *Journal of Economic History*, 73, 4 (2013), pp. 938-78.
- Hung, Le Manh, *The impact of World War II on the economy of Vietnam 1939-45* (Singapore: Eastern Universities Press, 2004).
- J. V., 'La hausse des prix en Indochine' *Bulletin Economique de la Indochine*, I (1942), pp. 28-55.
- Jong, Louis de, *The collapse of colonial society: the Dutch in Indonesia during the Second World War* (Leiden: KITLV Press, 2002).
- Jose, Ricardo T., 'Food production and food distribution programmes in the Philippines during the Japanese occupation' in Paul H. Kratoska, ed., *Food supplies and the Japanese Occupation of Southeast Asia* (Houndmills: Macmillan, 1998), pp. 67-100.
- Jose, Ricardo T., 'The rice shortage and countermeasures during the Japanese Occupation' in Ikehata Setsuho and Ricardo Trota Jose, eds., *The Philippines under Japanese Occupation* (Manila: Manila University Press, 1999), pp. 197-214.
- Kerkvliet, Benedict J. Tria, 'Withdrawal and resistance: the political significance of food, agriculture and how people lived during the Japanese Occupation in the Philippines', in Laurie J. Sears, ed., *Autonomous histories, particular truths* (Madison: University of Wisconsin Center for Southeast Asian History, 1993), pp. 175-93.
- Kratoska, Paul H., *The Japanese Occupation of Malaya* (London: Hurst & Company, 1998).
- Kratoska, Paul H., 'War and occupation in Penang, 1941-1945', *Journal of the Malaysian Branch of the Royal Asiatic Society*, forthcoming.
- Kurasawa, Aiko Iromata, 'Mobilization and control: a study of social change in rural Java, 1942-1945'. Ph.D diss., Cornell University, 1988.
- Kurasawa, Aiko, 'Forced delivery of paddy and peasant uprisings in Indramayu, Indonesia: Japanese occupation and social change', *Developing Economies*, 21, 1 (1983), pp. 52-72.
- Landon, Margaret, 'Thailand under the Japanese', *Asia and the Americas*, 44, 9 (1944), pp. 389-93.
- Lee Kuan Yew, *The Singapore story* (Singapore: Times Editions, 1998).
- Low, N. I., *When Singapore was Syonan-to* (Singapore: Eastern Universities Press, 1973).
- Low, N. I. and H. M. Cheng, *This Singapore (our city of dreadful night)* (Singapore: Ngai

- Seong Press, 1946).
- McGee, T. G., *The Southeast Asian city: a social geography of the primate cities of Southeast Asia* (London: G. Bell and Sons, 1967)
- MacGregor, R. B., 'Medical history of the war in Malaya', *Medical Journal of Malaya*, 3, 3 (1949), pp. 146-72.
- Marr, David G., *Vietnam 1945: the quest for power* (Berkeley: University of California Press, 1995).
- Murphey, Rhoads, 'New capitals of Asia', *Economic Development and Cultural Change* 5, 3 (1957), pp. 216-243.
- Nguyễn Thế Anh, 'Japanese food policies and the 1945 great famine in Indochina' in Paul H. Kratoska, ed. *Food supplies and the Japanese Occupation* (Houndmills: Macmillan, 1998), pp. 208-26.
- Nu, Thakin, *Burma under the Japanese: pictures and portraits*. Edited with and introduction by J. S. Furnivall (London: Macmillan, 1954).
- Ó Gráda, Cormac, *Black '47 and beyond: the great Irish famine in history, economy and memory* (Princeton: Princeton University Press, 1999).
- Ó Gráda, Cormac, *Famine: a short history* (Princeton: Princeton University Press, 2009).
- Osmeña, Sergio, Jr. 'Dear dad', n.d. (but c. 1947).
- Pe, U Hla, *Narrative of the Japanese occupation of Burma* (Ithaca: Southeast Asia Program, Cornell University, 1961).
- Pluvier, Jan M., *South-East Asian from colonialism to independence* (Kuala Lumpur: Oxford University Press, 1974).
- Prem Chaya and Alethea, *The passing hours: a record of five amazing years* (Bangkok: Chatra Books, 1945).
- Rama, F. C. de la, *I made millions and lost them* (Manila: Nation-Ad Philippines, 1957).
- Reynolds, E. Bruce, *Thailand and Japan's southern advance 1940-1945* (London: Macmillan, 1994).
- Sacay, Francisco M., 'The food supply and population of the Philippines', *Philippine Agriculturalist*, 33 (1950), pp. 203-17.
- Sandhu, Kernial Singh, 'The saga of the "squatter" in Malaya', *Journal of Southeast Asian History*, 5, 1 (1964), pp. 143-77.
- Sato, Shigeru, *War, nationalism and peasants: Java under the Japanese Occupation 1942-1945* (Armonk, NY: M. E. Sharpe, 1994).
- Sato, Shigeru, "'Economic soldiers" in Java: Indonesian laborers mobilized for agricultural projects', in Paul H. Kratoska, ed., *Asian labor in the wartime Japanese empire* (Armonk, NY: M. E. Sharpe, 2005), pp. 129-51.
- Scott, James C., 'An approach to the problems of food supply in Southeast Asia during World War Two' in Bernd Martin and Alan S. Milward, eds., *Food supply in the Second World War* (Ostfildern: Scripta Mercaturae, 1985), pp. 269-282.
- Sen, Amartya, *Poverty and famines: an essay on entitlement and deprivation* (Oxford: Clarendon Press, 1981).
- Skinner, G. William, *Chinese society in Thailand* (Ithaca: Cornell University Press, 1957).
- Sutter, John O., *Indonesianisasi: politics in a changing economy, 1940-1955, vol. 1 The Indonesian economy at the close of the Dutch period and under the Japanese* (Ithaca: Southeast Asia Program Cornell University data paper 36-I, 1959).
- Tin, U Sein, *Wartime in Burma: a diary, January to June 1942* (Athens: Ohio University Research in International Studies, 2009).
- Tinker, Hugh, 'A forgotten long march: the Indian exodus from Burma, 1942', *Journal of Southeast Asian Studies*, 6, 1 (1975), pp. 1-15.
- Tran, My-Van, 'Working for the Japanese: working for Vietnamese independence, 1941-45'

- in Paul H. Kratoska, ed., *Asian labor in the wartime Japanese empire* (Armonk, NY: M. E. Sharpe, 2005), pp. 287-99.
- Turley, William S., 'Urbanization in war: Hanoi, 1946-1973' *Pacific Affairs*, 48, 3 (1975), pp. 370-97.
- Twang, Peck Yang, *The Chinese business elite in Indonesia and the transition to independence* (Kuala Lumpur: Oxford University Press, 1998).
- van der Eng, Pierre, *Food supply in Java during the war and decolonization, 1940-1950* (Hull: University of Hull Centre for Southeast Asian Studies Occasional Paper no. 25 (1994)
- van der Eng, Pierre, 'Regulation and control: explaining the decline of food production in Java, 1940-6' in Paul H. Kratoska, ed. *Food supplies and the Japanese Occupation* (Houndmills: Macmillan, 1998), pp. 187-207.
- van der Eng, Pierre, 'Food for growth: trends in Indonesia's food supply, 1880-1995', *Journal of Interdisciplinary History*, 30, 4 (2000), pp. 591-616.
- van der Eng, Pierre, 'Productivity and comparative advantage in rice agriculture in Southeast Asia since 1870', *Asian Economic Journal* 18, 4 (2004), pp. 345-70.
- van der Eng, Pierre, 'Market responses to climate stress: rice in Java in the 1930s', *Australian Economic History Review* 50, 1 (2010), pp. 62-79.

Official publications

- Burma Intelligence Bureau, *Burma during the Japanese Occupation*, vol. 1 (Simla: Government of India Press, 1943).
- Burma Intelligence Bureau, *Burma during the Japanese Occupation*, vol. 2 (Simla: Government of India Press, 1944).
- Union of Burma, Census Department, *Towns classified by population with decennial variations from 1881 to 1953* (Rangoon: Superintendent of Government Printing and Stationary, 1954).
- Indochina, *Annuaire statistique de l'Indochine*, irregular series covering the years 1913-1946 and published 1927-1948 (Hanoi).
- League of Nations, *World economic survey, 1941/42* (Geneva: League of Nations, 1942).
- League of Nations, *World economic survey, 1942/44* (Geneva: League of Nations, 1945).
- Malayan Union, *Report of the medical department 1946* by R. B. McGregor (Kuala Lumpur: Malayan Union Government Press, 1947).
- Malayan Union, *Report on the British military administration of Malaya* by H. R. Hone (Kuala Lumpur: Malayan Union Government Press, 1946).
- Malaya, *Malaya, A report on the 1947 census of population*, by M. V. Del Tufo (London: Crown Agents, 1949).
- Malaya, *1957 Population census of the Federation of Malaya. report no. 14. final report by H. Fell* (Kuala Lumpur: Department of Statistics, Federation of Malaya, 1960)
- Netherlands, Centraal Bureau voor de Statistiek, 'De economische toestand van Nederlandsch-Indie tijdens de Japanse bezetting, 1942-45' (The Economic Situation of the Dutch Indies during the Japanese Occupation 1942-45) *Statistische en Econometrische Onderzoekingen* 2, 4 (1947), pp. 118-27.
- Philippines, *Census of the Philippines, 1939* (Manila: Bureau of Printing, 1942).
- Philippines, *In commemoration of the twelve new administrative districts of Manila: Manila, Philippines October 31, 1942* (Manila: Bureau of Printing, 1942).
- Philippines, Bureau of the Census and Statistics, *Yearbook of Philippine statistics 1946* (Manila: Bureau of Printing, 1947).
- Philippines, *Handbook Philippine Statistics 1903-1959* (Manila: Bureau of Printing, 1960).
- Singapore Department of Social Welfare, *A social survey of Singapore* (Singapore:

Department of Social Welfare, 1947).
United States, Office of Strategic Services, Research and Analysis Branch, *Philippine agriculture under Japanese control* (Washington, 7 August 1942).
United States, Office of Strategic Services, Research and Analysis Branch, *Manpower in Japan and occupied areas* (Washington, 26 August 1944).
United States, Office of Strategic Services, Research and Analysis Branch, *The programmes of Japan in the Philippines* (Washington, 1 September 1944).

Table 1 Southeast Asia Main City Populations, 1936-1957

	000 persons									
	Rangoon	Bangkok	Singapore Island	Penang	Kuala Lumpur	Jakarta	Surabaya	Saigon- Cholon	Hanoi	Manila
1936			603.2					256.0	149.0	
1937		827.3								
1938										
1939			727.6			544.8	403.0			623.5
1940						650.0				
January 1941								450.0		673.0
June 1941	501.2			247.5	144.4					
January 1942										
March 1942										300.0
October 1942										873.6
September 1942	300.0				150.9					
March 1943	400.0					846.6	500.0			940.0
December 1943									119.7	
February 1944										1,095.0
March 1944						863.0				
April 1944										1,119.9
July 1944	400.0		866.8		200.0					
February 1945	150.0									174.0
June 1945										
September 1945							618.0			
December 1945							209.0			
1945						847.5		500.0		
1946			928.7					492.2		
1947		889.5	940.8	446.3	176.0		250.4		10.0	
October 1948						1,243.0				

November 1948				415.7					
1948				1,050.0				237.1	983.9
December 1949				1,264.4					
1949				600.0		1,200.0			
January 1950	613.0								
1950				715.0					
1951				1,800.0		847.8		216.9	
1952									
1953	737.1							292.6	
1954								400.0	
1955									
1956		1,300.00							
1957		1,445.9	572.1	316.2	1,950.0	750.0	1,251.0	415.0	1,500.0

Notes: 1. As explained in the text and below, data must be treated with caution because in some instances they are estimates and so subject to a margin of error and because official population counts are unlikely to be exact. Furthermore, while population counts probably include those inside the Japanese distribution system for food and rationed goods others may be excluded and urban populations understated. The danger of exclusion applies especially to recent migrants to urban areas and would apply particularly to Java, the Philippines and Malaya. 2. We owe much of the population data for Indonesia to Pierre van der Eng who, in response to queries, gave us Dutch-language sources and data about which we would not otherwise have known.

Sources: **Burma:** Union of Burma, *Towns classified*, p. 2; Andrus, *Burmese economic life*, p. 25; Murphey, 'New Capitals', p. 226; Rangoon 14 September 1942; NARA RG262 fbis b114 September 1942. Radio report on the Far East no. 3 March 1943: Burma Intelligence Bureau, *Burma during the Japanese occupation*, vol. 2, p. 63; Rangoon 8 Sept 1942: U.S., Office of Strategic Services, *Manpower in Japan and occupied areas*, vol. 2, p. 212; Rangoon July 1944 and February 1945: Collis, *First and last*, p. 88. The July population is an approximate date and refers to the size of Rangoon prior to the exodus before Rangoon fell to the British. Jan. 1950: Cresssey, *Brief social survey*, p. 5; 1953: Union of Burma, *Towns classified*, p. 2.

Thailand: Murphey, 'New capitals', p. 226.

Malaya and Singapore: *Malya, Census 1947*, pp. 39, 44 589; Huff, *Economic growth*, p. 158; *Malaya, Census 1957*, pp. 8, 52-53; Population for 1936 for Kuala Lumpur is estimated assuming proportionate population growth between 1931 and 1947. Penang: 1941 NARA RG 226 21417 Security Intelligence for Planning Section Proforma A strategical. Penang and Province Wellesley. Penang population for 1941 and 1947 are island populations and so comparable with Singapore populations for 1939 and 1947. For discussion of the apparent lack of wartime population data for Penang including from newspapers, see Kratoska, 'War'. Kuala Lumpur: 1942 Japanese census and 1946 estimate: Report of Kuala Lumpur Town Board, 1 April 1946- 31 December 1946, p. 5 (RC Selangor 269/1947 1957/0292046); Kuala Lumpur mid-1944: Kuala Lumpur Sanitary Board, *Annual report 2062* (1941), pp. 3, 5, 7) (Syuseitvo Kanbo 113/2603); Singapore 31 January 1942: Allen, *Singapore 1941-1942*, p. 161. This figure must be treated with considerable caution. It is reported as 'close on 1,000,000' and was said to be swollen by troop reinforcements as well as by refugees. Since General Percival

had 85,000 men the population was probably no more than 900,000; Singapore 8 January 1943: Office of Strategic Services, *Manpower in Japan and occupied areas*, vol. 2, p. 235 gives a Singapore municipality population of 760,000; Singapore Island July 1944: Malaya, *Census 1947*, p. 589; Singapore island 1946: Harper, *End*, p. 42; Singapore island 1947: Malaya, *Census 1947*, p. 39. This 1947 island figure is for the Colony of Singapore and so may slightly overstate island population. 1957: Singapore, *Census 1957*, p. 43.

Indonesia: Jakarta Jan. 1941 (but in source end of Dec. 1940): 'Batavia's bevolking' ('Batavia's population') *De Sumatra post*, 10 Feb. 1941 43, 32 J. Hallermann Medan; Jakarta April 1943 and April 1944: U.S., Office of Strategic Services, *Manpower in Japan and occupied areas*, vol. 2, p. 257; Surabaya estimated March 1943 as 500,000: U.S., Office of Strategic Services, *Manpower in Japan and occupied areas*, vol. 2, p. 258; Jakarta June 1945: 'Hasil Pendaftaran Tjajah Djivah di Djakarta' (Result of census population Jakarta) *Soera Asia* 30 June 1945 No. 157 Soerabaja; Jakarta and Surabaya 1940 and 1945 and for Jakarta 1948: Dick, *Surabaya*, p. 123. The 1945 figure is for a complete census of Jakarta including Batavia and Mr. Cornelis and consisted of 676,261 Indonesians and 137,206 Chinese: Sutter, *Indonesianisasi*, p. 269; Jakarta Oct. 1948: 'De bevolking van Batavia' (The population of Batavia) *De nieuwsgier* 4 Oct. 1948, 4, 28 Batavia. This figure should, however, be treated with some caution, see 'De bevolking van Batavia' *De nieuwsgier* 11 Oct. 1948, 4, 34. Batavia. Jakarta 1949: 'Djakarta's bevolking' (Djakarta's population) *Java-bode : nieuws, handels- en advertentieblad voor Nederlandsch-Indie* 7 Jan. 1950 98, 129 Bruining Batavia: Surabaya 1947: Djoemlah pendoeboek Soerabaja' (total number of inhabitants of Surabaya) *Pelita Rakyat*, 28 Jan. 1948; Surabaya Nov. 1948: 'Djoemlah pendoeboek Soerabja meningkat' (the total number of inhabitants of Surabaya has increased) *Pelita Rakyat* 23 Dec. 1948; Surabaya 1951: 'Bevolking van Surabaja' (population of Surabaya) *De vrije pers : ochtendbulletin*, 14 Dec. 1951, 68 De Vrije Pers De Erven J. A. Wormser (Soerabaja); Jakarta and Surabaya 1951 and 1956: Murphy, 'New capitals', p. 227. Data for Jakarta's wartime population vary somewhat in sources but are typically of like magnitudes. For example, van der Eng, *Food supply in Java*, p. 37 gives a 1941 Jakarta population of 544,820 and Sato, "'Economic soldiers" in Java, p. 131 reports the growth of Jakarta's population as 594,000 to 844,000 during the occupation.

Indochina: Hanoi, Saigon-Cholon and Hanoi: *Annuaire statistique de l'Indochine, 1923-1929*, pp. 30-31, 61, 1931-32, p. 53, 1943-1946, p. 27. For Saigon-Cholon data for 1891, 1902, 1911, 1921, 1931 and 1938 is for 1890, 1902, 1910, 1921, 1930 and 1936; for Hanoi data in the table is for 1900, 1910, 1920, 1930 and 1936; and for Phnom Penh data for 1901, 1911, 1938 and 1946 is for 1900, 1910, 1936 and 1948. Data for 1946 and 1948 is from *Annuaire statistique, 1943-46*, pp. 27-28 and 1947-1948, pp. 19-21. For Saigon-Cholon the 1941, 1945, 1949 populations of 450,000, 500,000 and 1,200,000 are from Brocheux and Hémery, *Indochina*, pp. 131, 373. The figure of 500,000 for Saigon-Cholon from Brocheux and Hémery is confirmed by the *Annuaire Statistique, 1943-46*, p. 27 which gives a 1946 population of 492,200. For Saigon-Cholon the 1936 figure may be an undercount. The 1948 figure for Hanoi (but not for Saigon-Cholon) includes suburban population and so is not comparable with earlier data for Hanoi Nov. 1948, 1951, 1953, 1954: Turley, 'Urbanization', pp. 372-73. The figure 10,000 for Nov. 1948 is an estimate based on the known fact of a mass exodus from Hanoi after its near complete destruction. It may be that the figure of 10,000 refers to the inner city population and, if so, would represent the departure of at least 30,000 and compare with and inner city population of 80,000 in 1951. Cf. Goscha, 'Colonial Hanoi', p. 228. For 1956 data for Saigon-Cholon and Hanoi is for 1960 and from Mitchell, *International Historical Statistics: Africa, Asia and Oceania (2003)*, pp. 40-42. A rough estimate for Saigon for 1956 is 1.8m, a figure said to be explained by refugees from Tonkin and civil disorder in the south: Murphy, 'New capitals', p. 216.

Philippines: Manila 1939: Philippines, *Census of the Philippines: 1939, vol. 2*, p. 59; Manila March 1942: *Krekviter, 'Withdrawal and resistance'*, p. 309; Manila Oct. 1942: Philippines, *In commemoration*, p. 2. It is not clear to what extent, if any, the boundaries of Manila as defined by the Japanese in this publication (*In commemoration*) may have differed from the boundaries of the 1939 census. Manila March 1943: NARA RG56 e72A245 b31 'Labor conditions in Manila'. This March 1943 Japanese estimate put Manila's population at 940,000 and the population of Greater Manila, including suburban towns, at over a million. During 1943 and 1944 population data vary but make clear the great increase in Manila's population. There is a November 1943 estimate of 1,300,000 while early in 1944 a Tokyo broadcast reported the population of Manila of some 1,500,000. We prefer the figure of February 1944 of 1,093,000 because it is based on a survey by Mayor's office and reports of Neighbourhood Associations. The various estimates are reported in United States, Office of Strategic Services, *Manpower in Japan and occupied areas*, vol. 2, p. 292 which can also be found in NARA RG407 foar b2229-5; Manila February 1945: NARA RG407 e427 pcua h20 'History of Philippines Civil Affairs Unit no.20 Nov 44 - June 1945. This Civil Affairs Unit was in Manila beginning 6 February and took a census which found the population to be around 174,000. It estimated that 60% of the population needed relief and described a city in flames. For post-war statistics, see: Philippines, *Yearbook of Philippine statistics 1946* (Manila: Bureau of Printing, 1947), p. 10; Philippines, *Handbook Philippine Statistics 1903-1959* (Manila: Bureau of Printing, 1960), p. 8; Murphy, 'New capitals', p. 227. Urban population for 1948 and 1958 may be somewhat overstated for cities

other than Manila because of the conventions of official Philippine statistics which record population in political areas rather than the usual definition of a city as an unbroken urban area.

**Table 2 Southeast Asia Pre- and Post-World War II Urban Primacy
(ratio of first to second largest city)**

	Pre-war	Post-war
Burma (1938, 1950)	3.1	3.3
Malaya (1939, 1947)	2.9	2.1
Thailand (1947)		23.3
Indonesia (1940, 1948)	1.4	3.0
Indochina (1936, 1946)	1.7	2.1
Philippines (1939, 1948)	4.2	5.9

Note: Penang for 1939 is data for 1941 and for Saigon-Cholon population is for 1946 and Hanoi for 1948.

Source: Table 1.

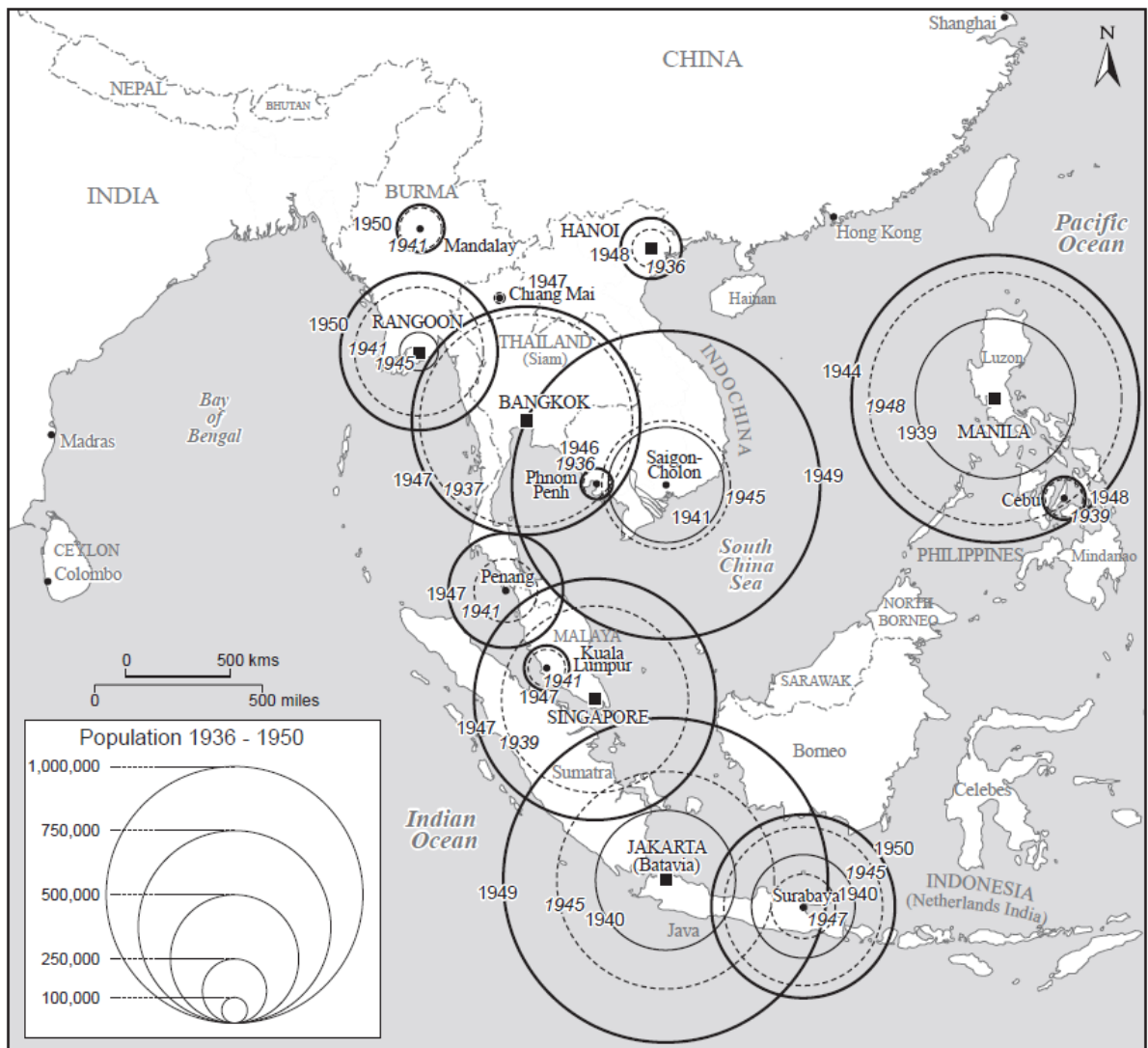


Figure 1 Southeast Asia main cities population 1936 - 1950

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