SOAS Bulletin of Burma Research, Vol. 1, No., 1, Spring 2003, ISSN 1479-8484

The Burma Development Disaster in Comparative Historical Perspective[1]

Anne Booth[2]

Abstract

This paper reviews the post-independence performance of the Burmese economy. It is argued that the devastation of war and the slow pace of economic recovery after 1950 meant that Burma took a very long time even to regain levels of per capita GDP which had been attained in the 1930s. There has been very little change in the sectoral shares of either national product or the labour force. The paper explores the reasons for this long-term stagnation, and examines the implications for long-term changes in living standards. Comparisons are also made with other countries in Southeast Asia.

Modern Burma, or Myanmar as it has been officially termed in recent years, is widely considered to be Asia's principal development disaster. The country emerged into independence along with many others in South and Southeast Asia in the aftermath of the Second World War, and was seen at the time as having good development prospects (Steinberg 2001, 32-34). And yet by the end of the twentieth century it had fallen well behind most of its neighbours in terms of both per capita GDP, and other development indicators. In 1999, it was ranked lower than India according to the United Nations Human Development Index and far lower than China and the other member states of the Association of Southeast Asian Nations (ASEAN), except for Laos and Cambodia (UNDP 2001, 142-3). Especially striking was the gap between Burma and Thailand, with whom it shares a long land border. Thailand's per capita GDP in 1999 was estimated to be slightly over six thousand dollars (corrected for purchasing power differences) compared with just over one thousand dollars in Burma.

For most international observers, there is little doubt about the allocation of blame for contemporary Burma's plight. After the army coup of 1962, a military regime led by General Ne Win adopted a series of policies aimed at converting Burma to a strictly socialist and autarkic economy. Certainly the country faced serious economic and political problems in the immediate aftermath of independence, including several secessionist movements among ethnic minorities in border regions. But as a recent obituary article pointed out, Ne Win did not manage to solve any of these problems. In fact

> his policy of state control, isolation and repression made things worse. Ethnic groups became bolder. Opium chiefs expanded their fiefs and corrupted the soldiers sent to close them down. Burma had been the world's largest exporter of rice, but by 1973 could hardly provide enough for its own needs. Income per person fell from $670 a year in 1960 to $200 in 1989.

[1] This is a revised version of a paper presented at the conference "Burma-Myanma(r) Research and its Future: Implications for Scholars and Policymakers" University of Gothenberg, Sweden, September 21-25, 2002. I am grateful to conference participants, and to R.M. Sundrum for helpful comments

[2] Anne Booth is Professor of Economics in the Department of Economics, SOAS.

> Despite having good farmland, high quality timber such as teak and minerals including oil, Burma was rated one of the world's poorest countries.[3]

In what follows, I will try to evaluate whether this is an entirely accurate account of the Ne Win years. Certainly it is one which is widely accepted, in Burma as well as abroad. In 1988, after massive protests in Rangoon and other cities, a new military junta took over and Ne Win retired, although he was rumoured to still exercise power behind the scenes (American Embassy 1996, 39). A reasonably free election was held in 1990 which was won by the National League for Democracy, led by Aung San Suu Kyi. But the military regime refused to recognise this result and has maintained its grip on power, although for much of the 1990s it tried to liberalise the economy, and allow a greater role for the domestic private sector and for foreign investors. But in contrast to Vietnam, where the Vietnamese Communist Party embarked on similar reforms at the same time, and in contrast to other Asian military-led regimes which gave high priority to economic reform, such as Park's in Korea and Suharto's in Indonesia, the results which have been achieved in Burma in terms of accelerated growth and improved living standards have been disappointing.

Recent evaluations of the economy by the US government, international development organisations and by independent academics have been critical of the lack of progress in implementing reform, and of the growing role of the illegal trade in narcotics (American Embassy 1996; Tun Wai 1996; Dapice 1998; UNDP 1998; US Department of Commerce, 1999; International Monetary Fund, 1999; Mya Than, 2000; Khin Maung Kyi et al. 2000; Steinberg 2001, chapter 5, Appendix 1; Asian Development Bank 2002). All these studies stress continued high military expenditures, low and declining revenues from legal taxes, low rates of saving and investment, extensive state involvement in the economy, poor financial performance of the large state enterprise sector, inadequate and deteriorating infrastructure, and declining government expenditures on health and education.

The purpose of this paper is not to challenge these evaluations, but rather to examine the performance of the Burmese economy in a longer time span than has been adopted in most recent studies, with a particular emphasis on comparisons with other Asian, and especially ASEAN economies. First, I will examine Burma's colonial legacy, and the transition to independence. I will argue that in several respects Burma in the immediate aftermath of independence faced problems which were more severe than those faced by most other Southeast Asian countries, and which placed substantial obstacles in the path of the broadly democratic governments which controlled the country until 1962. I then examine patterns of growth and structural change during the Ne Win years from 1962 to 1988. My main argument is that these years were marked not so much by falling per capita GDP as by a collapse of the export economy. In addition, (paradoxically for a regime which styled itself socialist) this period was characterised by a decline in government budgetary expenditures relative to GDP, and in the ability of the central government to carry out rational economic planning. The third part of the paper evaluates the performance of the economy after 1988, while in the concluding section, I will examine trends in growth and structural change in the economy over the twentieth century as a whole. Here I will argue that Burma presents a picture of economic and structural stagnation over a period of seven decades which is unique in Asia.

[3] *Economist*, December 14, 2002, p. 96

The Colonial Legacy and the Transition to Independence

In an appraisal of economic progress in Southeast Asia in the immediate aftermath on the second world war, Paauw (1963, 556) argued that the major economies in the region had grown at widely diverging rates. The star performer was the Philippines which recovered rapidly from the devastation of war and occupation, and after regaining pre-war levels of per capita GDP in 1950 grew at three per cent per annum in per capita terms over the 1950s. Thailand and what was then British Malaya (including Singapore) also recovered quite rapidly and achieved positive per capita growth rates in the 1950s, although Paauw considered progress in both economies to be 'unsteady'. But in 'Burma, Indonesia, and the Indochinese countries of Laos, Cambodia, and Vietnam, progress has taken the form primarily of restoring prewar levels of per capita production; it is unlikely that gains above prewar levels have been achieved'.

In the forty years since Paauw's estimates were published, new national income figures have become available for several Southeast Asian countries, which suggest that Paauw's claims were broadly correct for Thailand, but too optimistic for Burma, Indonesia and Vietnam. In Thailand, per capita GDP was already above the 1938 figure by 1950 (Sompop 1989). But in Indonesia and in both North and South Vietnam, per capita GDP in 1960 was still below 1938, and indeed 1929 levels. This was also the case in Burma (Table 1). In fact the official national income statistics released over the 1950s indicated that per capita gross domestic product in 1947/48 was only about 64 per cent of the 1938/39 level which was itself still well below the 1931/32 figure as estimated by Aye Hlaing (Table 2). By the early 1950s, per capita GDP in Burma, in international dollars corrected for terms of trade fluctuations, was less than 30 per cent of that in the Philippines, about 30 per cent of the Thai figure, and less than half that in India (Table 3).

Burma's output contraction in the 1930s, which was more severe than in most other parts of Southeast Asia, was entirely due to the very poor performance of the agricultural sector (Booth 2003). That in turn was related to the severe effects of falling rice prices on indebted farmers in the main rice-growing areas, which in many cases led to loss of land. The newly independent government gave high priority to reform of both the land tenure system and agricultural credit, 'the twin evils' of prewar Burmese agriculture (Trager 1958, 39-40). A prosperous and productive agricultural sector was viewed as the foundation on which a more diversified economy could be constructed. The government was also determined to use taxation and other revenues to increase spending on both infrastructural development and health, education and welfare. In contrast to the prewar economy where Burma had made large subventions to the budget of British India, and received little back in return, there was a determination to use national resources to improve the welfare of the entire population[4].

Over the 1950s, the government was successful in increasing budgetary revenues relative to GDP; by the latter part of the decade the ratio of revenues to GDP was almost twice that of 1938/39 (Table 4). Government expenditures also rose rapidly; in contrast to the colonial era the government budget was in deficit for most of the 1950s, although relative to GDP the deficits were not large. But ethnic and communist insurgencies necessitated a sharp increase in military expenditures, which accounted for around 30 per cent of total budgetary outlays for much of the decade. Although expenditure on

[4]See Shein, Thant and Sein (1969) for an analysis of the impact of the provincial contract system on Burma. They show that total revenues raised in Burma were above total expenditures in Burma from 1890 onwards, often by a very considerable margin. An extended discussion of colonial fiscal policy is given in Aye Hlaing (1965), Chapter III.

infrastructure development and on health and education did increase, relative to GDP, compared with 1938/39, the bold ambitions of the immediate post-independence era to build a welfare state in Burma were only very partially realised.

There were those who argued that Burma's failure to achieve prewar levels of per capita GDP during the 1950s was not just due to the unfavourable colonial legacy, wartime devastation, and high government expenditures on defence. In a paper written in the mid-1960s, a well-known Burmese economist, Hla Myint, drew a distinction between what he termed the "inward" and "outward" looking economies of Southeast Asia. He argued that there were at that time two discernible patterns of economic development in Southeast Asia, typified by Burma and Indonesia on the one hand, and Malaysia, Thailand and the Philippines on the other. (He did not explicitly consider the countries of former Indochina). Myint pointed out that while all the countries of South East Asia shared a common reaction after independence to what might be termed "the colonial economic pattern", the nature of the reaction differed between these two groups. The Philippines, Thailand and (British) Malaya

> seemed to have sensed early that it would be easier and quicker to change the economic structure and the pattern of of distribution of incomes and economic activities if the total volume of national output were expanding rapidly than in a situation of economic stagnation or slow growth. They also seemed to have realised that, given the basic conditions of their economies, the key to expanding their total national product was to be found in expanding the volume of their exports. Since a large share of these exports was produced by the foreign-owned mines and plantations, the governments of these countries took care to guarantee the security of foreign property and freedom to remit profits, and generally created a favourable economic environment which encouraged the foreign enterprises not only to continue their existing production but also to undertake new investments, to strike out into new lines of exports and to introduce new methods of production and organisation (Myint 1967: 2-3).

In contrast, Myint continued, the political leadership of Burma and Indonesia at that time "were obsessed by the fear" that once foreign enterprises were allowed to re-establish themselves or expand their operations, they would resume their old stranglehold over the economy, and re-impose the colonial economic pattern whereby most profits were remitted abroad, and the local populations gained little benefit from the exploitation of the economy's abundant natural resources. Myint argued that both countries did little to attract new investment and indeed nationalised a number of foreign-owned firms. They also adopted hostile policies to their Chinese and Indian minorities, so that many left either for their ancestral homelands or to settle in third countries. Nor did they encourage entrepreneurship among the indigenous majority; in both countries smallholder producers of export crops were taxed through export taxes and marketing boards, and there was little investment in infrastructure or new cultivation technologies which would directly benefit smallholder producers.

In some respects Myint's critique might seem too harsh, at least for the period up to 1962. Certainly the policies pursued after 1950 were not conducive to rapid export growth, and after the Korean War boom of the early 1950s, export earnings fell relative to GDP (Table 2). Burma's share of total exports from Southeast Asia also fell (Table 5). But this decline reflected in part at least declining markets in the USA and elsewhere for rice. The government could have done more to attract foreign investment, although Asia as a whole attracted little foreign investment in the years between 1950 and 1970. Most American investment went to Europe and Latin America, and Japan had not yet begun to invest abroad on a significant scale. A sizeable population of Indians and Chinese continued to live in Burma until the early 1960s, and the government tolerated their presence even if their domination of some sectors was resented[5]. Perhaps most important of all, the economy did achieve reasonable growth over the 1950s; per capita GDP growth was around three per cent per annum between 1951 and 1960. Although this was not enough to restore prewar levels of GDP, it did mean that most households were better off at the end of the 1950s than they were a decade earlier.

The Ne Win Era: 1962-1988

The Myint critique of 'inward-looking' policies was more applicable to the years after 1962, when the thrust of government policy was deliberately towards greater isolation from the world economy, and towards a planned, socialist economy with only a very restricted role for the private sector. The first objective was largely achieved, at least as far as recorded economic activity was concerned, by the end of the 1970s. But the government's success in achieving the second objective was more problematic. After 1962, production for export was discouraged through increasing over-valuation of the exchange rate, and total bans on any new foreign investment in export-oriented agriculture, mining or industry. Production of rice, which was the main export staple of the pre-war era, had regained pre-war levels in the early 1960s (Richter 1976, table 3). But because of the growth in population, and procurement and exchange rate policies which made production for export increasingly unprofitable, the exportable surplus fell from 2.8 million tons in the latter part of the 1930s to under 0.5 million tons by the early 1970s (Richter 1976: table 1). By 1965, exports from Burma accounted for less than five per cent of the ASEAN total compared to over 11 per cent in 1937 (Table 5). Exports per capita, in nominal US dollars, were by the early 1970s only one third of the level achieved in 1934-38 (Table 6). The contrast with other ASEAN economies, and with Taiwan, was glaring.

In spite of the socialist rhetoric, the government was also notably unsuccessful in mobilising more resources or in increasing government budgetary expenditures relative to GDP. By the mid-1970s, government revenues amounted to only about 12 per cent of GDP, a sharp decline from the late 1950s. Government expenditure also declined relative to GDP (Table 4). The main policies adopted by the government in pursuit of the "Burmese way to socialism" were nationalisation of both foreign and domestic businesses, starting with the Burmah Oil Company and the Indo-Burma Petroleum Company, and the expulsion of many Indians, Chinese and Anglo-Burmans (Tun Wai 1996, 158-9). No attempt was made to collectivise agriculture, although the government did attempt to dictate which crops were to be sown in specific regions. Nor did the government succeed in implementing East European or Soviet-style central planning:

> Early efforts to introduce classical central planning techniques were quickly abandoned, in part because data were unreliable and in part because planners trained in Eastern Europe were never fully integrated into the Burmese state apparatus...Expertise was insufficient to run the private businesses that had been nationalised. There was overoptimistic reporting on the economic situation and downplaying of difficulties, especially in the oil sector, as officials feared they would lose their jobs if targets were not met (Tun Wai 1996, 158-9).

But in spite of the failure of central planning, Burma did not escape some of the negative aspects of Soviet-style regimes. After 1962, the number of state economic enterprises (SEEs) grew rapidly, and by the early 1980s, their expenditures accounted for

---

[5]The estimates of post-war population given by Sundrum (1958, 54) show that in 1955, the foreign (i.e. non-indigenous) population accounted for 16 per cent of the total urban population.

around 50 percent of GDP (Table 4). Most of the SEEs faced the 'soft budget contraints' which were typical of East Europe and the former Soviet Union. Managers had little incentive to make profits, as state banks extended loans to cover losses. Spasmodic attempts at reform, often mandated by foreign donors, did not produce lasting benefits and overall deficits worsened over the 1980s (Cook 1994, 123). Although the state budget was in surplus, at least until the mid-1970s, the deficits of the state enterprise sector more than outweighed the budget surpluses (Tun Wai 1996, 179). The overall deficit of the government sector, funded by credit creation, fueled inflation and the black market rate of the *kyat* fell sharply relative to the official rate. Official export and import trade was controlled by the state, but there was virtually no incentive to produce for legal export and by 1980 Burma's share of ASEAN exports had fallen to less than one per cent (Table 5).

The upshot of these policy failings was that economic growth was sluggish over the 1960s and early 1970s, and per capita gross domestic product only returned to 1938/39 levels in 1976. It regained the pre-war maximum attained in 1931/32 in 1981 (Figures 1 and 2). The years from 1976 to 1985 saw some improvement in GDP growth, mainly due to improved performance in agriculture. The net value of agricultural output almost doubled between 1974/75 and 1985/6 (Mya Than 1988, table 4). This increase was due to increases in output per unit of land, as net sown area did not change much over the decade. But the technology-driven improvment in the agricultural sector was not sustained after the mid-1980s, and other sectors of the economy continued to stagnate. In the latter part of the 1980s per capita GDP fell, so that the 1991 level was still below that of sixty years earlier (Figure 1).

It is instructive to compare the performance of the Burma economy after 1962 with that of Indonesia, which was the other Southeast Asian economy characterised by Myint as 'inward looking'. In the mid-1960s the two economies had a number of features in common including large public sector deficits, mounting inflation and an over-valued exchange rate. An abortive coup in late September 1965 led to the fall of President Soekarno and the rise to power of a little-known army officer, Soeharto. He assembled around him a team of American-educated economists, who implemented a package of policies designed to end inflation and accelerate economic growth. A new foreign investment law was passed in 1967 and by 1970 the exchange rate was unified at a much lower level, which ended smuggling and gave greater incentives to domestic producers of traded goods. These policies, together with a considerable improvement in Indonesia's terms of trade, ushered in three decades of continuous economic growth, during which per capita GDP almost quadrupled (Figure 1). By the end of the 1980s, reformers in Burma, including some in the military were asking whether Burma also should not embark on similar economic reforms.

Post-1998 Reform Policies

During the early 1990s the military junta which took power in 1988 effected a partial liberalisation of the domestic economy, and a more positive effort was made by the government to attract foreign investment (Myat Thein and Mya Than 1995, 216-24). A dual exchange rate regime was introduced and by the mid-1990s, it was claimed that few transactions, apart from intra-public sector ones, took place at the grossly over-valued rate. Indeed a report issued by the American Embassy in Rangoon argued that although the existence of the official rate 'continues to complicate foreign investment, it is no longer an impediment to economic growth or a major source of macroeconomic instability' (American Embassy 1996, 2-3). These attempts to move away from the inward-looking policies of the previous three decades did lead to an acceleration in economic growth; average annual growth in per capita GDP accelerated to 3.9 per cent between 1988 and 1999, although many doubts were raised about the accuracy of the data (See appendix).

As in previous growth spurts, improved agricultural performance was the main factor contributing to the growth of output. The agricultural and trade sectors together accounted for over half of total growth in GDP between 1988 and 1999 (Table 7).

But by the latter part of the 1990s it was clear that the military regime (now known as the SPDC, the State Peace and Development Council) was not emulating the 'hard' developmental states such as South Korea under Park or Indonesia under Soeharto. While the regime achieved some success in ending border insurgencies, it proved unable to solve 'three of Burma's most intractable problems - ethnic disunity, economic underdevelopment, and drugs production and trafficking' (Rudland and Pedersen 2000, 9). There is little doubt that the bargains struck between the government and various insurgent groups in border areas have encouraged those with large drug fortunes at their disposal to 'whiten' at least part of their wealth holdings by repatriating them into the domestic economy. This was probably an important reason for the relative stability of the free market rate of the kyat in the latter part of the 1990s, when many ASEAN currencies underwent sharp depreciations (Lintner 2000, 189). Just how dependent the Burmese economy has become on drug money since the early 1990s is unclear. But there can be little dispute that Burma's heroin production, now the largest in the world, comprises a substantial, although unrecorded, part of GDP.

But after 1998, the factors maintaining the stability of the free market rate of the *kyat,* whether drugs profits, legal inward flows of foreign investment or remittances from overseas Burmese, were no longer sufficient to maintain the parity at around 350 to the dollar. By December 2000 it had fallen to 430 to the dollar, and by February 2003 to 1,100 to the dollar[6]. The reasons for this sharp decline lie with the increasing domestic rate of inflation relative to international rates, which is due to rapid growth in the money supply. Although expenditures of the SEEs declined relative to GDP in the early 1990s, the government failed to bring under control the SEEs' deficits and the deficit on the government budget, which appears to have been funded largely by borrowing from the banking system.

The growing budget deficit was in turn the result of the steep decline in tax revenues relative to GDP which occurred over the 1990s (Table 4). By the mid-1990s, the tax/GDP ratio was around one third of that achieved in the late 1950s. However substantial tax reveunes were being levied in kind, especially in the form of 'uncompensated, often involuntary labour' (American Embassy 1996, 85). The burden of such taxes fell largely on rural households, who were often very poor. Budgetary expenditures also fell relative to GDP over the 1990s, although not as fast as tax revenues. Defence expenditures recorded in the budget had risen to three per cent of GDP by the mid-1990s, and accounted for about 30 per cent of total budgetary expenditures.

Legal exports continued to fall relative to those of other ASEAN countries, and by 1998 Burma accounted for only 0.3 per cent of ASEAN exports (Table 5). Net private capital inflows from all sources, although positive in the latter part of the 1990s were very low in comparison to most other ASEAN countries (Asian Development Bank 2001, table 39). The government has blamed the Asian Crisis of 1997/98 for the falling off in inward investment flows but the real explanations lie with international sanctions, threats of consumer boycotts in the USA and elsewhere, and the unstable domestic inflationary climate.

---

[6] *Far Eastern Economic Review*, December 14, 2000, February 27, 2003.

Longer term Development Issues

Growth and Structural Change In spite of the record of slow economic growth in per capita terms over the last half of the 20th century, aggregate output in Burma has grown. Although there are serious problems with the data, it does appear that per capita GDP doubled between 1950 and 1985, and after the retrogression in the latter part of the 1980s, there was further growth over the 1990s, although the rate of growth shown by the official data may well be overstated (Figure 1). We would therefore expect some structural change since 1950, as predicted by Kuznets and other scholars of modern economic growth. The share of agriculture in total GDP should have fallen over time, and that of the industrial sector (including manufacturing industry) and the modern service sector should have grown.

But no such structural transformation seems to have occurred. The share of agriculture in GDP did fall somewhat between 1947/48 and 1973/74 but rose thereafter, so that by the end of the 1990s, agriculture accounted for much the same proportion of total national product as it had in 1938/39. Similarly the share of agriculture in the total labour force, as recorded in population censuses and labour force surveys, has changed little since the British Indian census of 1931 (Table 8). Such a lack of structural change is almost unique among the economies of Asia in the second half of the 20th century. What explains it?

First we should bear in mind that many agricultural prices in Burma have been controlled by the government and subject to sudden and quite major changes. One study noted that the high share of agriculture in GDP in the latter part of the 1980s and 1990s is at least in part due to the decontrol of paddy purchase prices in 1987 (Than Nyun 1990: 22). But even allowing for these changes, Than Nyun argued that "the overall structure of production has not changed substantially over the last fifty years". This indeed is supported by the labour force data.

A further explanation lies in the weak growth performance of the non-agricultural sectors, especially the manufacturing sector. In most other ASEAN economies, including the slow-growing economy of the Philippines, the industrial share of GDP has grown since 1950, and the share of manufactured exports in total exports has also expanded, to the point where manufactures now account for between 40 and 80 per cent of total exports in the Philippines, Indonesia, Thailand and Malaysia (World Bank 2002: 238-9). There has been no such development in Burma. The available data indicate that the share of maufacturing in GDP grew quite rapidly after independence, and by 1961 had reached at least 10 per cent (Table 8). After that it appears to have fallen slightly, although there was a change in the composition of manufacturing output over the 1980s, towards food and beverage processing and away from clothing (Lutkenhorst 1990, table 4).

The reforms of the early 1990s do not appear to have increased the share of manufacturing in either GDP or the labour force. Indeed the liberalisation of border trade has led to a flood of manufactured products from both Thailand and China, with which local industries can compete neither in terms of quality or price. As a percentage of GDP, value added in manufacturing is only slightly higher in 1999 than in 1988; the manufacturing sector only accounted for about ten per cent of the growth in real GDP over these years (Table 7). If the official data are to be believed, the manufacturing sector accounted for a lower percentage of the employed labour force in 1995 than in 1931[7]. It is also surprising that the reforms of the 1990s did not lead to a higher share of sectors such

[7] The higher proportion in 1931 could be due to a larger number of workers enumerated as active in small-scale and cottage industry, rather than in industry.

as trade and finance in GDP, as these sectors were re-opened to private sector initiatives after more than two decades of government domination. Guyot (1988, 113-4) argues that the main structural change after 1962 was a fall in the share of the trade sector in GDP, from about 30 per cent in 1961/62 to 20 per cent two decades later. This percentage appears to have changed litte over the 1990s. The fastest growing sector in the post-1988 era was construction, although it accounted for less than five per cent of GDP in 1988, and only contributed eight per cent of the total growth over these years (Table 7).

But if there has been little change in the structure of output and employment in Burma over the last 50 years, there has been a dramatic change in the pattern of final demand in the economy, as shown by the GDP data broken down by expenditure (Table 9). In the late 1930s, private and government consumption expenditures accounted for just under 71 per cent of total GDP, investment for 12 per cent, while the balance (17 per cent) was accounted for by net exports. By the early 1950s, the share of consumption had risen to 76 per cent of GDP, and investment to 18 per cent. Net exports were still positive but had fallen to just over five per cent. Since then the trend has been towards a growing share of government and private consumption in GDP, and a falling share of investment, while net exports have become negative (Table 9). Both exports and imports have accounted for under five per cent of GDP in the 1990s.

The explanations for these trends are complex. Certainly, as Nyun (1990: 22-4) argued, there was a deliberate policy after independence to divert both rice and petroleum products (the two main export staples before 1940) to domestic consumption, which increased at the expense of exports after 1950. After 1960, the increasing over-valuation of the *kyat* meant that exports and imports were undervalued in the national accounts compared with non-traded goods and services. This also affected valuation of investment expenditures, as most investment goods were imported. In addition, official exchange rate policies provided few incentives to producers of traded goods, and over time more resources went into production of non-traded goods, or into production of exports which were smuggled out of the country.

. Indeed the collapse of Burma’s recorded export sector after 1960 is quite staggering, especially in comparison with the export growth which has taken place in other parts of Asia. In nominal dollars, per capita exports from Burma were a third of their 1934-38 level in 1969-73, and although there was some growth thereafter, they were still very low in the 1990s compared with their ASEAN partners (Table 6). Of course it must be stressed that these figures refer to legal exports and ignore the widespread smuggling which has occurred since the 1960s. Also excluded are illegal exports of drugs.

Accommodating a Growing Population in Agriculture Given that agriculture remains the main source of income for the majority of Burmese households, it is important to examine the process by which a growing population has been accommodated in the agricultural sector. Burma is often portrayed as a land-abundant country, with quite low population densities compared with much of Asia, a lower number of agricultural workers per arable hectare, and considerable reserves of unexploited agricultural land. FAO figures show that Burma averaged just under two agricultural workers per hectare of arable land in the late 1990s, which was less than half the figure for Vietnam, Bangladesh and China, and lower than Indonesia and the Philippines although much higher than Thailand (FAO 1999). Only 17 per cent of agricultural land was irrigated, a very low ratio by Asian standards.

Over the twentieth century, the cultivated area in Burma has grown, but not as fast as the agricultural labour force. In 1931, net sown area per agricultural worker was around 1.5 hectares, which was considerably higher than in Japan, Taiwan or Java at the same time[8]. In the four decades from 1931 to 1971, net sown area per agricultural worker fell to around 1.1 hectares (Table 10). This was still quite a high figure by Asian standards. In addition, an increase in the cropping ratio offset this decline to some extent, so that gross sown area per agricultural worker declined rather more slowly. From 1971 to 1995 there was a steady decline in net sown area per agricultural worker, although the increase in the cropping ratio which occurred in the early 1990s led to an increase in gross cropped area per agricultural worker (Table 10).

Given this relative land abundance, together with a steady increase in the cropping ratio, it might be thought that most agricultural workers in Burma have cultivated their own holdings, and few have been tenants or employed as agricultural labourers. But in 1931 almost 40 per cent of the male agricultural labour force were in these categories (Table 11). This must have reflected the increasing dispossession of cultivating farmers by money lenders, which created not just large numbers of tenant farmers but also many rural households which were almost totally dependent on wage labour. After independence, official policy was to eliminate tenancy and landlessness through land nationalisation and redistribution[9]. After 1970 official data on tenancy was no longer given in the annual Reports to the People's Assembly *(Pyithu Hluttaw)*, on the grounds that after land nationalisation, it no longer existed (Steinberg 1981: 127-28). The 1983 Population Census did not offer any information on the extent of tenancy but it did suggest that landlessness (as indicated by the proportion of the agricultural labour force working as employees) was far from eliminated in the early 1980s (Table 11).

Since then the problem may well have become worse. The Agricultural Census carried out in 1993 found that there were 2.95 million households with agricultural holdings, comprising 15.9 million people (American Embassy 1996, 36). If we assume that half are economically active (slightly higher than the estimate for the country as a whole in 1993) then this suggests that around eight million agricultural workers were in households which had access to land, compared with a total agricultural labour force in 1993 of almost eleven million (Asian Development Bank 2001, 267). The remaining three million must have been in households with no access to land. Such estimates are very rough, but they are supported by a few longitudinal village studies which suggest growing numbers of landless households (Mya Than 1987, 71).

Many rural households which did cultivate land were facing severe hardship by the mid-1990s. Taxation of farm incomes through government export controls which depress farmgate prices, and through corve labour obligations is heavy. Only the largest farmers get access to credit and agricultural machinery. Indeed it has been argued that a process of land concentration is underway which is producing an agrarian structure closer to the Philippines and Latin America rather than to the more egalitarian Asian countries such as Taiwan (Dapice 1998, 157).

---

[8]Hayami, Ruttan and Southworth (1979) give a thorough examination of the growth of agricultural land and labour in Japan, Taiwan, the Philippines and South Korea over the century from 1870 to 1970. In Japan in the 1870s there was only 0.3 hectares of arable land per agricultural worker although there was a slow growth in land per worker after 1900.

[9] Land nationalisation was enacted in 1948, but implementation was slow. Steinberg (1981: 126) points out that some tenants were evicted as a result of land nationalisation and became landless labourers. He also argues that, because land nationalisation in effect made the state the landlord, it did not eliminate insecurity of tenure for many cultivators. In their survey of agricultural performance in Burma, Mya Than and Nishizawa (1990: 91) argue that the main thrust of post-independence land policy in Burma has been to "break up the landlord-tenant relationship in order to create a new government-owner-cultivator relationship and, at the same time, to strengthen government control over farmers".

Trends in Living Standards since 1950

During the colonial era, many travellers in British India compared living standards in Burma very favourably with those in other parts of the sub-continent, and these positive impressions were supported by official opinion, backed up by admittedly sketchy statistics (Steinberg 1981, 84). Burma certainly had much higher literacy rates than the rest of British India at the time of independence, mainly because of the tradition of monastic education. As Steinberg (1981, 93) noted, "to be illiterate indicated a lack of moral standing". This attitude extended to women as well as men, and British officials frequently noted the widespread ability of Burmese women to both read and write, in sharp contrast to the situation in the rest of the subcontinent. After independence, the government placed considerable emphasis on increasing access to education, and on adult literacy campaigns. The 1983 Population Census reported that 86 per cent of males over the age of ten and 73.5 per cent of women were literate.

Other indicators of living standards, such as infant mortality and life expectancy also improved after independence, although data on health and demographic indicators were often poor outside the larger towns. By the early 1970s, life expectancy at birth was estimated to be just under fifty years which was lower than in the Philippines, China and Thailand and about the same as India, Indonesia and Vietnam (UNDP 2001, 166-69). But these three countries all managed to increase life expectancy more rapidly than Burma over the next 25 years, so that in the latter part of the 1990s, life expectancy in Burma was lower than in most neighbouring countries except Laos and Cambodia. As already noted, the United Nations Human Development Index which is based on an average of educational, health and income indicators ranked Burma at 118 in 2001, which was towards the bottom of the "medium development group" UNDP 2001, 143).

There can be little doubt that the main reason for Burma's failure to achieve improvements in health indicators commensurate with those achieved in neighbouring countries since the 1970s is that budgetary allocations to the health sector have not kept up with inflation and population growth. Between 1963 and 1983, annual real per capita expenditure on health increased fivefold. But after 1983, expenditures began to fall and by 1996, real per capita expenditures were only 41 per cent of the level reached in 1983 (UNDP 1998: 30). By the mid-1990s health expenditures amounted to only 0.5 per cent of GDP, which was a very low percentage in comparison with most other Asian economies. Public health facilities in most parts of the country were reported to be in poor shape, and offered only a very limited range of treatments. Private health care was expanding but most private facilities were in urban areas and often charged high fees (UNDP 1998: 31). Over the 1990s, there was also a decline in real per capita expenditures on education.

The health and education data suggest a rather paradoxical trend in Burma in the latter half of the twentieth century. In the immediate post-independence era, and indeed in the first two decades of the Ne Win regime, there was significant improvement in social indicators. This progress was accompanied by steady growth in per capita consumption expenditures (as reported in the national accounts), which had returned to 1938 levels by the late 1970s and were almost a third higher than in 1938/39 by 1985/86 (Figure 2). There was also a substantial increase in domestic rice availability per capita; Richter's estimates suggest that it increased by over 30 per cent between the late 1940s and the late 1960s (Table 12). There was probably some increase over the 1970s as well[10]. The

[10]The *Report on the Survey of Household Expenditures of 1958 for Rangoon* presented a comparison of the 1958 survey with one carried out in Rangoon in 1927. While per capita consumption of rice, pulses, eggs and oils had increased, that of meat, poultry and fish had declined. It is likely that these trends reflect changing relative prices more than changing incomes.

improvement in domestic rice consumption was partly the result of increasing real consumer purchasing power, but also the result of the deliberate government policy of diverting the exportable surplus to the domestic market at prices which were well below world market prices.

But the policy of favouring consumers over producers inevitably damaged producer incentives and encouraged smuggling of both rice and rice products (American Embassy 1996, 33). The government was forced to respond to this by increasing producer prices, and also prices to the consumer. Domestic rice consumption does not appear to have increased significantly since the early 1970s; indeed the household expenditure survey carried out in 1997 reported an average per capita rice consumption of 5.92 *pyi* (12.6 kg) or just over 150kg per annum which is little different from the figure estimated by Richter for the late 1960s[11]. Over the early 1990s, the national accounts data show falling per capita consumption expenditures (Figure 2), in spite of the growth in total GDP. Although there was some recovery in the latter part of the decade, real per capita consumption expenditures in 1999 were still below the level achieved in 1985, and only 22 per cent higher than in 1938/39[12].

In 1999 the International Monetary Fund argued that Burma's record in poverty reduction was "poor compared to most other East Asian economies" (International Monetary Fund 1999: 30). In 1997, a comprehensive Household Income and Expenditure Survey (HIES) was carried out which permitted the estimation of poverty incidence by region[13]. It was found that nationally 23 per cent of the population fell below a poverty line set in terms of a packet of basic needs, and that there was wide variation by region, with the incidence of poverty much higher in rural than in urban areas. Given that this was the first HIES to be carried out in Burma on a national scale, it is not possible to estimate trends in poverty over time. But there is little evidence to suggest that the incidence of poverty has declined significantly over the 1990s; indeed it could have increased[14].

The government's failure to convert the accelerated growth in real GDP which occured over the 1990s into improved living standards for the bulk of the population has been attributed in several recent reports to failures in government policy. The UNDP (1998: 32) argued that four "prominent factors have constrained human development in Myanmar": low tax mobilization, high defence expenditures, weak public administration and an uncertain policy environment. In the mid-1990s Burma's ratio of tax to GDP had fallen to historically low levels, and was much lower than in other ASEAN economies or in India (International Monetary Fund 1999: 16). Budgetary expenditures on defence were twice as high as those on health and education, and the ratio was much higher than in neighbouring countries (UNDP 1998: 33). Both the UNDP and the International Monetary Fund placed the blame for poor government revenue mobilization on the weak and corrupt

---

In addition the ethnic composition of the city had changed greatly over these three decades, which would have affected household consumption patterns.

[11]The *1958 Survey of Household Expenditures* reported that monthly per capita rice consumption in Rangoon was 12.9 kg., which was slightly higher than that reported in the 1997 Household Survey for Yangon (11.5 kg). This could be explained by the fact that the 1958 data include rice donated to monks; it is not clear whether such donations are also included in the 1997 figure.

[12]It should be noted that the national income data do not distinguish between government consumption expenditures and household consumption expenditures. To the extent that the former grew more rapidly than the latter over the 1990s, growth in household consumption expenditures would have been lower than is suggested in Figure 2.

[13]The analysis of the 1997 survey and the estimation of poverty were carried out by the World Bank in a study that has not yet been generally released.

[14]If average per capita consumption expenditures have not greatly increased over the 1990s, or even declined, while at the same time the distribution of consumption expenditures have become more skewed, it is likely that the extent of poverty has increased.

administrative system, which was in turn the result of salary erosion caused by high inflation. In addition, the International Monetary Fund drew attention to the generous tax exemptions which have been granted to favoured investors in large-scale agricultural projects.

Burma as a Development Disaster

The evidence is incontrovertible that the pace of economic change in Burma has been painfully slow in the last half of the twentieth century in comparison with most of its neighbours, not just in South East Asia but also in South Asia and China. The government's application to have Burma reclassified as a "least developed" economy, made in March 1987, signalled to the outside world just how far behind the Asian "tigers" Burma had fallen. In fact the application was probably made mainly to achieve the cancellation of a debt to West Germany and easier terms on even larger borrowings from Japan (Guyot 1988, 113). Given its high literacy rates Burma did not strictly qualify for "least developed" status, and the government did not give the decision much publicity at home. After the failure to recognise the 1990 election results, the suppression of the NLD, and the harsh treatment of Daw Aung San Suu Kyi, Burma has been ostracised by the international develpoment community, and development assistance has been reduced to a trickle.

Indonesia, the Southeast Asian country which Myint singled out, along with Burma, as being "inward looking" in the mid-1960s, began to re-orient its economy after 1966, and achieved both faster economic growth and greater structural transformation than Burma in the last third of the twentieth century. Economic nationalism is hardly extinct in Indonesia, and indeed hostility to foreign control of the economy has become more pronounced in the post-Soeharto period. But few in Indonesia advocate a return to the autarkic economic policies of the early 1960s. Even war-torn Vietnam (not considered by Myint in 1967) has achieved rapid growth over the 1990s after implementing a succession of economic reforms. Indeed the World Bank (2002) reported that the Vietnamese economy grew faster over the 1990s than any other ASEAN economy except Singapore.

Burma, by contrast, has achieved only fitful growth and very little structural transformation, even if the official national income data are taken at face value. While there has undeniably been some improvement in both economic and social indicators since 1950, to many outside observers the pace of change has been far too slow. Even after 1988, when the government did implement at least some reforms designed to "open up" the economy, the results were disappointing. Inward flows of private capital were very small in comparison with most other ASEAN economies (Asian Development Bank 2001, table 39). There has been a large disparity between foreign investment commitments and actual implementation, which according to one report "highlights a very uncertain investment environment, created by inept economic and political management (Burma Economic Watch 2001). And as yet, there is little evidence that the more rapid economic growth has led to any improvement in living standards for the mass of the population.

There can be little doubt that Burma's colonial legacy was an unfavourable one, and that legacy, combined with the destruction wrought during the years from 1942 to 1945, put Burma well behind most of its neighbours when the post-independence race for economic growth and transformation began. Indeed it could be argued that, compared with the Philippines, which started the race with far more advantages, and seemed in the 1950s to be in a much more favourable position to achieve rapid economic growth than most other countries in the region, Burma's achievement has not been too bad. Per capita GDP has increased, and there has been progress in health and education, even if much of it occurred in the first three decades after independence.

Yet far more could have been achieved. Successive governments in Burma have been reluctant either completely to sever economic links with neighbouring economies and the rest of the world, or to pursue the kinds of policies which would maximise the benefits from such links. After independence there was in Burma, as in many other former colonies, a strong conviction that colonial economic policies while promoting exports, failed in utilising the benefits of export growth to improve living standards for the local population. Because there was a large internal market for Burma's main export staples, especially rice, it was understandable that early independence leaders felt strongly that Burmese rice should be channelled to local rather than foreign markets. But over time, such attitudes have hardened into a rigidly inward-looking policy regime, with a powerful set of vested interests determined to preserve it. Although there has been some progress over the 1990s in expanding the role of the private sector, much remains to be done if the Burmese economy is to achieve its full development potential.

Many outside Burma place the blame on the military-led governments which have controlled the country since 1962. Certainly they must shoulder much of the responsibility for the poor economic performance. Yet elsewhere in Asia, military-led governments, displaying scant regard for democratic niceties, have achieved rapid rates of economic growth and structural transformation. The problem in Burma is not the dominance of the military per se, but rather that the military have been either unwilling or unable to share power with other groups, whether technocrats in the civil service or private entrepreneurs, who could place the economy on a secure and sustainable upward path.

Steinberg (2001, 164) has succinctly summarised the most damaging aspects of government policies. He stresses the determination of successive governments to spend on the military rather than on infrastructure, to micro-manage the economy and markets when they obviously lack the capacity to do so, to cut the country off from new technologies, and most serious of all, to encourage the best and the brightest among the younger generation to leave the country. Other regimes in Asia and elsewhere have committed at least some of these policy errors. But few have stubbornly maintained such as disastrous mix of policies over four decades. The reaction of the developed countries has been to curtail all forms of development assistance, and discourage investment by private firms. If by these policies they hope to effect a change in economic policies, or a reduction in the production and export of narcotics, there is little evidence that they have been successful. The real losers from the current stand-off are the Burmese people.

References

American Embassy. 1996. *Foreign Economic Trends Report: Burma***.** Rangoon: American Embassy. June.

Andrus, J.R. 1948. *Burmese Economic Life*. Stanford: Stanford University Press.

Asian Development Bank. 2001. *Growth and Change in Asia and the Pacific: Key Indicators, 2001.* Manila: Asian Development Bank, October.

Asian Development Bank. 2002. *Asian Development Outlook, 2002*. Manila: Asian Development Bank.

Aye Hlaing. 1964. "Trends of Economic Growth and Income Distribution in Burma, 1870-1940." *Journal of the Burma Research Society* 47 (June): 89-148.

Aye Hlaing. 1965. *An Economic and Statistical Analysis of Economic Development of Burma under British Rule*. PhD Dissertation, University of London.

Booth, Anne. 2000. "Crisis and Response: A Study of Foreign Trade and Exchange Rate Policies in Three Southeast Asian Colonies in the 1930s." In Peter Boomgaard and Ian Brown (eds.). *Weathering the Storm: The Economies of Southeast Asia in the 1930s Depression*. Leiden: KITLV Press and Singapore: Institute of Southeast Asian Studies.

Booth, Anne. 2001. "Four Colonies and a Kingdom: A Comparison of Fiscal, Trade and Exchange Rate Policies in South East Asia in the 1930s." *Modern Asian Studies* 37.2: 429-60.

Burma Economic Watch. 2001. *Foreign Direct Investment and the Garments Industry in Burma*. Sydney: Burma Economic Watch, June.

Collignon, Stefan. 1997. "The Burmese Economy and the Withdrawal of European Trade Preferences." *EIAS Briefing Paper, no 97/02*. Brussels: European Institute for Asian Studies.

Cook, Paul. 1994. “Policy reform, privatization and private sector development in Myanmar.” *South East Asia Research* 2 .2 (September): 117-40.

Dapice, David. 1998. "Development Prospects for Burma: Cycles and Trends." In Robert I. Rotberg (ed.). *Burma: Prospects for a Democratic Future*. Washington: Brookings Institution.

Eng, Pierre van der. 2002. "Indonesia's Growth Performance in the Twentieth Century." In Angus Maddison, D.S. Prasada Rao and William F. Shepherd (eds). *The Asian Economies in the Twentieth Century*. Cheltenham: Edward Elgar.

Government of Burma. 1961. *Statistical Yearbook 1961*. Rangoon: Central Statistical and Economics Department.

Guyot, James F. 1989. "Burma in 1988: Perestroika with a Military Face." *Southeast Asian Affairs 1989***.** Singapore: Institute of Southeast Asian Studies.

Hayami, Y., Vernon W. Ruttan and Herman Southworth (eds.). *Agricultural Growth in Japan, Taiwan, Korea and the Philippines*. Honolulu: University Press of Hawaii.

Hill, Hal. 1984. "Industrialization in Burma in Historical Perspective." *Journal of Southeast Asian Studies* 15.1 (March): 134-49.

Hill, Hal and Sisera Jayasuriya. 1986. *An Inward-Looking Economy in Transition: Economic Development in Burma since the 1960s*. Singapore: Institute of Southeast Asian Studies.

International Monetary Fund. 1986. *International Financial Statistics Yearbook 1986*. Washington: International Monetary Fund.

International Monetary Fund. 1999. *Myanmar: Recent Economic Developments, IMF Staff Country Report No. 99/134*. Washington: International Fund.

International Monetary Fund. 2001. *Myanmar: Statistical Appendix, IMF Staff Country Report No.01/18*. Washington: International Fund.

International Monetary Fund. 2002. *International Financial Statistics Yearbook 2002*. Washington: International Monetary Fund.

Khin Maung Kyi et al. 2000. *Economic Development of Burma: A Vision and a Strategy*. Stockholm: Olof Palme International Center.

Lewis, W. Arthur. 1969. *Aspects of Tropical Trade 1883-1965*, Stockholm: Almqvist and Wiksell.

Lintner, Bertil. 2000. "Drugs and Economic Growth in Burma Today." In Morten Pedersen, Emily Rudland and Ronald J. May (eds.). *Burma, Myanmar: Strong Regime, Weak State*. Adelaide: Crawford House Publishing.

Lutkenhorst, Wilfried. 1990. "Industrial Development and Industrial Policy in Myanmar: Turning Challenges into Changes." In Mya Than and Joseph L.H. Tan (eds.). *Myanmar: Dilemmas and Options*. Singapore: Institute of Southeast Asian Studies.

Maung, M.I. Khin. 1997. *The Myanmar Labour Force: Growth and Change, 1973-83*. Singapore: Institute of Southeast Asian Studies.

McCarty, Adam, M. Paunlagui and Vu Quoc Huy (not dated). *Vietnam Data Bank 1976-91*. Canberra: Australian National University.

Ministry of Home and Religious Affairs. 1986. *Population Census 1983*. Rangoon: Immigration and Manpower Department. June.

Ministry of National Planning. 1960. *The National Income of Burma*. Rangoon: Government Printing and Stationary, Union of Burma.

Ministry of National Planning. 1961. *Second Four-Year plan for the Union of Burma (1961-62 to 1964-65)*. Rangoon: Government Printing and Stationary, Union Of Burma.

Mya Than. 1987. "Little Change in Rural Burma: A Case Study of a Burmese Village (1960-80)." *Sojourn: Social Issues in Southeast Asia* 2.1 (February): 55-88.

Mya Than. 1988. "Growth Pattern of Burmese Agriculture: A Productivity Approach." *Occasional Paper 81*. Singapore: Institute of Southeast Asian Studies.

Mya Than. 2000. "Recent Developments in Myanmar: Impact and Implications of ASEAN Membership and Asian Crisis." In Morten Pedersen, Emily Rudland and Ronald J. May (eds.). *Burma, Myanmar: Strong Regime, Weak State*. Adelaide: Crawford House Publishing.

Mya Than, and Nobuyoshi Nishizawa. 1990. "Agricultural Policy Reforms and Agricultural Development in Myanmar" in Mya Than and Joseph L.H. Tan (eds.). *Myanmar: Dilemmas and Options*. Singapore: Institute of Southeast Asian Studies.

Myat Thein and Mya Than. 1995. "Transitional Economy of Myanmar: Performance, Issues, and Problems" in Seiji Finch Naya and Joseph Tan (eds.). *Asian Transitional Economies: Challenges and Prospects for Reform and Transformation*. Singapore: Institute of Southeast Asian Studies.

Myint, Hla. 1967. "The Inward and Outward Looking Countries of Southeast Asia", *Malayan Economic Review* 12: 1-13.

Paauw, Douglas. 1963. "Economic Progress in Southeast Asia." Journal of Southeast Asian Studies 23 (November): 69-92.

Revolutionary Government of the Union of Burma. 1965. *The Union Budget in Brief: Fiscal Year 1960-61, 1961-62, 1962-3*. Rangoon: Central Press.

Richter, Hazel V. 1976. "Burma's Rice Surpluses: Accounting for the Decline." Working Paper No 3. Development Studies Centre, Canberra: Australian National University.

Rudland, Emily and Morten B. Pedersen. 2000. "Introduction: Strong Regime, Weak State?" in Morten Pedersen, Emily Rudland and Ronald J. May (eds.). *Burma, Myanmar: Strong Regime, Weak State***.** Adelaide: Crawford House Publishing.

Saito, Teruko and Lee Kin Kiong. 1999. *Statistics on the Burmese Economy: The 19th and 20th Centuries*. Singapore: Institute of Southeast Asian Studies.

Shein, Maung, Myint Myint Thant and Tin Tin Sein. 1969. " "Provincial Contract System" of British Indian Empire, in Relation to Burma- A Case of Fiscal Exploitation." *Journal of the Burma Research Society* 52.2 (December): 1-27.

Sompop Manarungsan. 1989. *Economic Development of Thailand, 1850-1950: Response to the Challenge of the World Economy*. PhD Dissertation, State University of Groningen.

Steinberg, David I. 1981. *Burma's Road Toward Development: Growth and Ideology under Military Rule*. Boulder: Westview Press.

Steinberg, David I. 2001. *Burma: The State of Myanmar*. Washington: Georgetown University Press.

Sundrum, R.M. 1957. "Population Statistics of Burma." *Statistical Paper No. 3, Economics Research Project*. Economics, Statistics and Commerce Departments, University of Rangoon, December.

Than Nyun, U. 1990. "Myanmar", Paper prepared for the Inter-governmental Meeting on the ESCAP Least Developed Countries, Bangkok: Economic and Social Commission for Asia and the Pacific, February.

Trager, Frank N. 1958. *Building a Welfare State in Burma: 1948-56*. New York: Institute of Pacific Relations.

Tun Wai, U. 1996. "Myanmar" in P.B Rana and Naved Hamid (eds.). *From Centrally Planned to Market Economies: The Asian Approach, Volume 3 Lao PDR, Myanmar and Viet Nam*. Hong Kong: Oxford University Press.

Turnell, Sean. 2002. *Burma's Economy- A Reply to Zaw Tun*. Sydney: Burma Economic Watch and Macquarie University.

UNDP. 1998. *Human Development in Myanmar: An Internal Report*. Yangon: United Nations Working Group, July.

UNDP. 2001. *Human Development Report 2001: Making New Technologies Work for Human Development*. New York: Oxford University Press, for the UNDP.

US Department of Commerce. 1999. *Burma: Economic Trends and Outlook*. Washington: US Department of Commerce, National Trade Data Bank.

Walinsky, Louis J. *Economic Development in Burma 1951-60*. New York, Twentieth Century Fund.

World Bank. 2002. *World Development Report 2002*. New York: Oxford University Press.

TABLES

Table 1. Index of Growth of Real GDP Per Capita, 1929-60 (1960 = 100)

Year	Indonesia	Burma	North Vietnam	South Vietnam
1929	115	148[a]	102	133
1938	115	121	106	146
1951	87	77	97	90
1956	96	96	99	69
1960	100	100	100	100

a 1931/32

Sources: Indonesia: van der Eng (2002, 171-73) ; Burma: Aye Hlaing (1965, 289); Ministry of National Planning (1960); North and South Vietnam; unpublished estimates from Jean Pascal Bassino.

Table 2. Growth in Domestic Product: 1901-2 to 1958/59

Year	Per Capita NDP/GDP	Index	As % of NDP/GDP	
	(Kyats)[a]	(1938/39 = 100)	Exports	Taxes
1901/02	55	95	30	13
1906/07	44	76	42	16
1911/12	48	83	41	14
1916/17	65	112	35	11
1921/22	56	97	47	13
1926/27	64	110	36	13
1931/32	71	122	40	23
1936/37	66	114	50	22
1938/39	58	100	48	19
1938/39	302	100	33[b]	12[c]
1947/48	194	64	n.a	n.a
1952/53	201	67	30	18
1958/59	241	80	20	19

a Up to 1938/39 the data are in constant prices of 1901/2, and refer to net domestic product (NDP). The last three rows are in constant prices of 1947/48, and refer to gross domestic product (GDP).
b The percentage is lower than the one calculated by Aye Hlaing because his estimate of Net Domestic Product is lower than the GDP estimate given in the post-war national income statistics.
c The percentage is lower that calculated by Aye Hlaing, partly because his estimate of NDP is lower, but also because the post-war data only include central government revenues.

Sources: 1901/02 to 1938/39: Aye Hlaing (1965, 289); 1938/39 to 1951/52: Ministry of National Planning (1960).

Table 3. Per Capita GDP in Burma and other Asian Countries, 1950-54, 1960-64 and 1985-9 (1985$: annual averages for the five years shown)

	1950-54	1960-64	1985-89
Burma	245	361	556
India	617	800	1142
China	n.a	487	1282
Laos	n.a	n.a	1316
Philippines	896	1204	1627
Indonesia	n.a	583	1688
Thailand	804	1027	2790
Malaysia	n.a	1544	4082
Taiwan	967	1387	6708
Singapore	n.a	1899	9578

Note: data refer to 1985 dollars, corrected for differences in purchasing power.
Source: Penn World Tables, version 5.6.

Table 4. Budget Revenues and Expenditures as a Percentage of GDP, 1938/39 to 1996/97[a]

Year	Total Revenues	Total Expenditures[b]	Defence[c] Expenditures	Health & Education Expenditures
1938/39	11.8	11.7	1.4	1.1
1954/55	19.9	21.0	7.1	2.6
1959/60	20.9	22.1	7.0	3.0
1976/77	12.1	13.6 (56.7)	n.a	n.a
1981/82	16.1	15.9 (66.8)	3.4	2.8
1986/87	12.0	14.7 (50.1)	2.6	2.9
1991/92	9.3	12.0 (36.8)	3.8	2.9
1996/97	7.1	8.8	3.0[d]	1.6 [d]

a Data refer to five-year averages centered on the years shown except for 1938/39.
b Figures in brackets show consolidated government expenditures, including those of the state economic enterprises.
c Defence expenditures exclude subsidies such as the electricity, rice and fuel subsidies (American Embassy 1996, table K).
d Data refer to 1996/97 only.
Sources: Revolutionary Government of the Union of Burma (1965); Tun Wai (1996), Tables A 28 and A29; International Monetary Fund (1999), (2001).

Table 5. Percentage breakdown of export value by country in ASEAN: 1937-1998

Country	1937	1955	1965	1980	1995	1998
Burma	11.5	6.2	4.7	0.7	0.3	0.3
Indochina	6.5	2.9	3.0	0.5	2.1	3.2
Cambodia				0.0	0.3	0.2
Lao PDR				..	0.1	0.1
Vietnam				0.5	1.7	2.8
Indonesia	33.6	25.6	15.1	30.5	14.2	14.8
British Malaya	34.3	44.9	48.1	51.3	60.6	56.3
Malaysia				18.0	23.0	22.2
Brunei				6.4	0.7	0.8
Singapore				26.9	36.9	33.3
Philippines	9.4	11.3	16.0	8.0	5.4	8.9
Thailand	4.7	9.1	13.1	9.0	17.6	16.5
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source: Lewis (1968, table 9). 1980, 1995 and 1998 data from International Monetary Fund (2002, 128-9); data on Brunei from Brunei Darussalam, *Statistical Yearbook,* 1990 and 1998. Data on Vietnam for 1980 from McCarty, Paunlagui and Huy (not dated, 81). Data from Burma in 1937 from Andrus (1948, table 23; in 1955 and 1965 from International Monetary Fund (1971).

Table 6. Exports Per Capita (current US$) in South East Asia, 1909-13, 1934-38, 1969-73, 1993-97 (annual averages for the five years shown)

	1909-13	1934-38	1969-73	1993-97
Myanmar	10	12	4	24
Indochina	3	4	n.a	80[a]
Malaysia	88	88	178	3,246
Singapore[b]			1,004	30,256
Indonesia	5	6	10	231
Philippines	5	8	31	248
Thailand	4	6	26	852
Taiwan	6	6	155	4,969

a Data refer to Vietnam only
b In 1909-13 and 1934-38 Singapore is included with Peninsular Malaya under Malaysia.

Sources: 1909-13 and 1934-38: Booth (2000), Table 14.1; 1969-73 and 1993-97: **International Financial Statistics** (Washington: International Monetary Fund, monthly)

Table 7. Sectoral Contributions to Changes in GDP (constant 1985/86 prices)

Sector	**% Share of GDP 1988**	**1999**	**% Break-down of Increment in GDP by Sector 1988-1999**
Total GDP	100.0	100.0	100.0
Agriculture	47.9	43.2	37.9
Mining	0.7	2.1	3.7
Manufacturing	8.7	9.4	10.2
Utilities	0.6	1.1	1.6
Construction	1.5	4.6	8.2
Trade	22.4	20.8	19.0
Transport	4.2	6.2	8.5
Finance	3.4	2.1	0.6
Public Admin.	5.9	6.5	7.1
Other	4.7	4.0	3.3

Source: Asian Development Bank (2001), pp. 266-67

Table 8. Agriculture and Manufacturing Industry as a Percentage Share of GDP and the Labour Force: 1938/9 to 1999/200

Year	As Percentage of GDP		As Percentage of the Labour Force[c]	
	Agriculture[a]	Manufacturing[b]	Agriculture	Manufacturing
1938/39	45.8	5.7	69.6[d]	10.7[d]
1947/48	48.5	5.4	n.a	n.a
1953/54	44.7	6.3	62.9	9.3
1960/61	40.1	10.5	n.a	n.a
1973/74	40.0	10.4	63.8	10.4
1983/84	49.0	9.6	64.6	9.2
1990/91	47.8	9.1	65.6	7.2
1999/00	43.2	9.4	n.a	n.a

a From 1938/39 to 1960/61 data in constant 1947/48 prices are used; from 1983/84 to 1999/00 data in constant 1985/86 prices are used. The 1973/74 ratio is taken from Nyun (1990, table 8).
b From 1938/39 to 1971/72, the percentage shares are those given in Hill (1984), Tables 2 and 3. From 1983/84 the percentages are estimated from the national income data in constant 1985/86 prices as reported in Asian Development Bank (2001, 266-67).
c The agricultural data are taken from Population Censuses, as reported in Than Nyun (1990, Table 6). The 1990/91 data for the agricultural and manufacturing labour force are from a Labour Force Survey, as reported in Asian Development Bank (2001, 266-67). The estimates of the manufacturing labour force shares for 1973 and 1983 are those estimated from the labour force data in the 1973 and 1983 Population Censuses as reported in Maung (1997), Table 3.15.
d Figures refer to 1931, as reported in the *Census of British India* of that year.

Sources: Ministry of National Planning (1960), Table VII; Government of Burma (1961, table 166); Than Nyun (1990), Tables 6 and 8; Hill (1984); Maung (1997); Asian Development Bank (2001, 266-7).

Table 9. Breakdown of GDP by Final Use, 1938/39 to 1999/00

Year	Consumption	Investment	Exports	Imports	Total
1938/39	70.6	12.2	32.8	-15.6	100.0
1951/52[a]	76.4	18.2	5.4		100.0
1961/62[a]	81.6	16.5	1.9		100.0
1973/74	87.2	10.2	6.5	-3.9	100.0
1983/84	85.7	18.0	6.8	-10.4	100.0
1990/91	88.3	13.4	1.9	-3.6	100.0
1999/00	87.0	13.4	0.3	-0.7	100.0

a Exports for these years refer to exports net of imports.

Source: Ministry of National Planning (1960), Table 1B; Than Nyun (1990); Asian Development Bank (2001)

Table 10. Gross and Net Sown Area per Agricultural Worker, and Cropping Ratios, 1931-1995/96

Year	Cropping Ratio	Hectares per Agricultural Worker	
		Gross Sown Area	Net Sown Area
1931	1.06	1.62	1.54
1971/72	1.15	1.24	1.08
1975/76	1.16	1.19	1.03
1980/81	1.21	1.16	0.96
1985/86	1.24	1.08	0.87
1990/91	1.22	0.98	0.81
1995/96	1.41	1.14	0.81

Sources: Saito and Lee (1999), Tables 1.7 and II.1 and International Monetary Fund (2001), Table 16; 1931 labour force data from Walinsky (1962),Table 1.

Table 11. Percentage Breakdown of the Male Labour Force by Occupational Category, 1931 and 1983[a]

Category of Worker	1930		1983
	Total	Indigenous	
Total	**100.0**	**100.0**	**100.0**
Cultivating landowners[b]	31.1	36.3	46.0
Tenants	14.2	16.0	n.a
Agricultural labourers	24.3	26.9	13.3
Other labourers	11.7	6.7	26.3
Other workers	18.7	14.2	14.5

a 1930 data exclude male working dependents; 1983 data exclude unpaid family workers.
b 1983 data include employers and own account workers in agriculture.
Sources: Walinsky (1962), Table 2; Ministry of Home and Religious Affairs (1986), pp. 2-133-4

Table 12. Per Capita Rice Availability and Index of Per Capita Consumption Expenditures, 1947/48 to 1971/72

Years	Per capita Rice Availability (Kg. per year)	Index of Real Consumption Expenditures (1938/39=100)
1947/48 to 1951/52	116	84 (1947/48)
1952/53 to 1956/57	108	72 (1954/55)
1957/58 to 1961/62	109	89 (1959/60)
1962/63 to 1966/67	138	94 (1964/65)
1967/68 to 1971/72	153	94 (1969/70)

Sources: Richter (1976), Table 11; Ministry of National Planning (1961), Table 18.

Appendix: Data Sources

Figures 1 and 2 have been produced using several different series on real per capita GDP, reported in Government of Burma (1961), International Monetary Fund (1986), and Asian Development Bank (2001). They must be treated as approximate estimates only. There are numerous problems with the statistical data in Burma which have been widely discussed in the literature (see e.g. Hill and Jayasuriya 1986, 69-70; American Embassy 1996, 7-9; and Turnell 2002). Some are problems common to many developing countries in Asia and elsewhere, but there can be little doubt that government policies such as the extreme over-valuation of the *kyat* and the resulting undervalued and unrecorded trade have aggravated weaknesses in official statistics in Burma. In addition, the suppression of private sector activities after 1962 encouraged black markets which meant that economic activities in sectors such as trade and transport have been consistently under-recorded. Writing in the late 1980s, Guyot (1988, 114) quoted estimates which suggested that the non-opium part of smuggled exports might amount to US$3.0 bilion per annum. Although border trade has been legalised in recent years, and figures on its magnitude are available, the data are still almost certainly underestimated. In addition, according to international conventions, illegal activities such as production and trade in narcotics, are excluded from the national income estimates. Collignon (1997:3) quotes estimates which suggest that the production and trade of narcotics would add 12 to 15 per cent to GDP, although this must be considered a very speculative calculation. Taking all these factors into account, the official estimates of GDP are certainly understated. The growth rates are probably more reliable, but could well be misleading for short periods. For example it is alleged that over the 1990s the GDP deflators systematically under-state price inflation, which means that the growth rates shown in the official data are too high (American Embassy 1996, 8). The problems with the national income data were admitted in a speech in August 2000 by Brigadier General Zaw Tun, Deputy Minister for National Planning and Economic Development (Turnell 2002).