Economics and Finance in Indonesia
Vol. 61 No. 1, 2015 : 1-20
p-ISSN 0126-155X; e-ISSN 2442-9260

Accumulation, Development, and Exploitation in Different Colonial and Post-Colonial Contexts: Taiwan, Indonesia and the Democratic Republic of the Congo, 1900-80☆

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Abstract

The Belgian Congo (Zaire, now the Democratic Republic of the Congo), the Netherlands Indies (Indonesia), and Taiwan/Formosa (now the Republic of China) experienced policies during the 19th and early 20th century which could be termed exploitative or extractive, although some policies in these colonies could also be termed developmental. All three colonies had a troubled passage to independence, and the immediate post-independence era was marked by considerable political and economic turmoil. But the growth performance of the three former colonies has been very different. Taiwan has seen very rapid growth sustained over decades; Indonesia's economic growth since 1970 has been quite robust; the Congo has seen a growth collapse which is extraordinary even by African standards. The paper suggests some explanations for this divergence in terms of policies pursued by the Japanese, Dutch and Belgian colonial regimes, and by post-independence governments in these countries.
Keywords: Post-Colonial; Development; Economic History; Economic Growth

Abstrak

Kongo koloni Belgia (Zaire, atau kini Republik Demokratik Kongo), Hindia Belanda (Indonesia), dan Taiwan/Formosa (kini Republik Cina) mengalami kebijakan-kebijakan yang dapat dipandang bersifat eksploitatif atau ekstraktif selama abad ke-19 dan awal abad ke-20, walaupun beberapa kebijakan di koloni-koloni tersebut juga dapat dipandang mendukung pembangunan. Ketiga koloni menghadapi kesulitan dalam memperjuangkan kemerdekaan, dan era segera setelah kemerdekaan ditandai dengan instabilitas politik dan ekonomi. Namun, kinerja pertumbuhan ketiga mantan koloni tersebut sangat berbeda. Taiwan mengalami pertumbuhan yang sangat pesat dan berkesinambungan dalam beberapa dekade; pertumbuhan ekonomi Indonesia terjaga cukup stabil sejak 1970; sedangkan Kongo mengalami keruntuhan pertumbuhan yang luar biasa untuk standar Afrika sekalipun. Tulisan ini memaparkan beberapa penjelasan atas divergensi kebijakan yang diterapkan oleh rezim koloni Jepang, Belanda, dan Belgia, serta oleh pemerintahaan pasca kemerdekaan di negara-negara bersangkutan.
Kata kunci: *Pasca Penjajahan; Pertumbuhan Ekonomi; Pembangunan dan Sejarah Ekonomi*

JEL classifications: O57, P52

1. Introduction

Since the 1960s a substantial body of literature has emerged which has discussed the negative effects of colonial control for particular countries and regions. In many former colonies, the view that colonial states were exploitative and predatory, and imposed substantial economic costs on their populations is still widely held, and has often been used by post-colonial states to legitimize their regimes. It has become part of the ideology of post-independence nationalism in many former colonies in Asia, Africa and the Caribbean that colonialism was, and continues to be, the main reason for their poverty and underdevelopment. But it is now fifty

☆This paper draws on Booth (2013a).

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years or more since the advent of political independence in most parts of Asia and Africa. Is it plausible to continue to attribute their economic performance, whether good or bad, to the legacy of colonialism? Surely post-colonial governments have had ample time to build on the positive legacies of the colonial era, and to remedy the negative legacies. If they have not done this, the failure must reflect their own deficiencies.

This paper investigates these arguments in the context of three former colonies, the Democratic Republic of the Congo (DRC), Indonesia, and Taiwan. Most people who take any interest at all in international development issues will know that by the end of the 20th century, Taiwan was already an industrialized economy with a per capita GDP well above most other Asian economies, and close to that of Japan, its former colonial master. Indonesia had experienced considerable growth during the Suharto era, but experienced a sharp decline in GDP in 1998, and slow recovery thereafter. Per capita GDP in the early 21st century was well below several of Indonesia's Southeast Asian neighbours, including Thailand and Malaysia, and below China. The DRC was, even by African standards, a development catastrophe. Real per capita GDP had been falling continuously for several decades. In its *2010 Human Development Report*, the UNDP noted that the DRC was one of a very small number of countries where the human development index was lower in 2010 than in 1990 (UNDP 2010, p. 151).

In the 1950s, few people would have predicted these outcomes. In 1945, after the defeat of Japan in the Pacific War, Taiwan was handed back to China, then controlled by the Kuomintang (KMT) government led by Chiang Kai Shek. Under Japanese rule, Taiwan had made considerable progress, and by the late 1930s was more developed than most of the Chinese mainland. Recent estimates indicate that per capita GDP more than doubled between 1901 and 1938 (Sato et al. 2008, p. 351). But after retrocession, its economy was plundered by mainlanders, and a revolt in 1947 was brutally put down. Monetary control collapsed, and inflation was out of control between 1944 and 1948[1]. For most of the population there was little improvement after the KMT was defeated by the Chinese Communists in 1949, and the leadership fled to Taiwan. In 1950 Taiwan's per capita GDP was well below that reached in the late 1930s, although it grew through the 1950s. The Belgian Congo also made considerable economic progress over the 1950s, and in 1960 per capita GDP was above that of Indonesia, where the cumulative impact of the Japanese occupation (1942–45) and the struggle for independence between 1945 and 1949 was devastating for the economy. Recovery in Indonesia after 1950 was slow, and per capita GDP in 1960 was still below that achieved in 1941 (van der Eng 2002, p. 172).

After 1960, the fortunes of the three former colonies diverged. Taiwan's economic growth accelerated and per capita GDP rose by more than quadrupled between 1960 and 1980. After 1965, Indonesia's fortunes also began to look up, and per capita GDP rose by more than doubled between 1965 and 1980 (**Table 1**). But after independence in 1960, the country which became Zaire, and then the DRC, was unable to maintain the progress of the 1950s. Per capita GDP grew only slowly over the 1960s and fell after 1970 (**Table 1**). The decline continued into the 1980s, and beyond. The national income figures for Zaire are certainly distorted by the rapid growth of the unrecorded economy after 1980, and the unreliability, or non-existence, of statistics. The extent of the decline in output per capita may this be exaggerated but the available evidence does indicate that the decline took place, at least until the early 21st century[2].

How can we explain these divergent outcomes? This paper suggests that different colonial policies were important, and had a number of consequences for post-colonial growth in the three countries. But at the same time external forces in the world economy after 1950 cannot be ignored. The terms of trade for many primary-exporting economies fluctuated considerably between 1950 and 1980 with some products, such as oil, enjoying a boom while others, including copper, experiencing a slump from the mid-1970s. The three

[1]An eye-witness report of the events from 1945 to 1949 on Taiwan can be found in Kerr (1965). Between 1940 and 1948, the GDP deflator is estimated to have increased from 0.125 to 237.1 (Sato et al. 2008, p. 347).

[2]On the size and nature of the unrecorded economy, see MacGaffey et al. (1991). A good overview of the problems with the statistical system in what was then Zaire is given in World Bank (1980), Annex 1. A recent survey of the reliability of statistics can be found in Marivoet and de Herdt (2014).

Table 1: Per Capita GDP, 1951–1980 (2005 International Dollars)
PPP Converted Per Papita GDP 2005 Prices
(Laspeyres Index, Derived from Growth Rates of c,g,i)

Year	DRC	Indonesia	Taiwan
1951	619	n/a	1,236
1956	810	n/a	1,594
1960	691	665	1,859
1965	732	648	2,510
1970	738	816	3,543
1975	735	1,160	4,939
1980	700	1,497	7,427

Source: Heston, Summers, and Aten (2012)

countries under discussion reacted to both external shocks and internal political problems very differently which reflected changing power balances between military and civilian governments and the role of technocratic advisers. But before examining the post-1950 developments, the paper addresses colonial policies across the three countries.

2. Analysis

2.1. Colonial Development Policies: Taiwan, Indonesia, and the DRC

It is widely believed, not least by many in the three nations concerned, that the reason for Taiwan's success after 1950 was the favourable legacy from the Japanese colonial era, while the weaker performances of both Indonesia and the DRC were the result of the Dutch and Belgian colonial legacies which neglected broad-based development policies and concentrated exclusively on providing infrastructure and other support for large agricultural estates and mining companies. This section examines and compares policies implemented in the three former colonies under the headings of infrastructure, agricultural development, education and population growth. In all these areas there were significant differences between the three colonies.

Infrastructure: In the Belgian Congo, infrastructure development was increasingly emphasized by government in the inter-war years. After 1920, government expenditures on capital works, particularly transport infrastructure, accelerated, although railway development was largely in private hands, with government guarantees ensuring minimum returns on investment[3]. The rail network expanded more than fourfold to 4,600 kilometers by 1938; the road network grew more than ten-fold, and by 1938 had reached 140,000 kilometers. By the late 1930s, road densities were about the same as in Indonesia, although rail densities were lower (**Table 2**). In addition there were over eleven thousand kilometers of navigable rivers. While it was true that large tracts of the Belgian Congo had seen very little infrastructure development before 1940, that was equally the case in many parts of Indonesia outside Java.

Critics of Belgian policy, such as Peemans, pointed out that the policy of building up an integrated transport network within the colony was expensive, and it would have been cheaper to have integrated the eastern part of the Belgian Congo into the transport networks to the Indian Ocean through British territories. But the Belgian colonial authorities regarded the lower transport costs of the other colonial networks as a danger rather than an opportunity (Peemans 1975a, p. 207), A similar attitude encouraged the Dutch to disrupt the traditional trading links between Singapore and Sumatra, Kalimantan and other parts of the outer islands, and re-direct them to Java, although this policy was at best only partially successful[4].

The years from 1945 to 1960 witnessed a change in Belgian colonial policy, in part the result of political change in Belgium which gave the traditionally

[3]These guarantees led to substantial payments to private companies in 1935; see Naval Intelligence Division (1944, p. 441).

[4]Lindblad (2002, p. 101) argues that at the end of the 19th century, the outer islands of Indonesia were still highly integrated with mainland Southeast Asia, especially the Straits ports. This changed only slowly after 1900.

Table 2: Road and Rail Densities: the Congo, Indonesia and Taiwan 1938/9 and 1958/9

Description	Congo	Indonesia	Taiwan
1938/39			
Road Densities	29.00	27.70	94.40
Rail Densities	2.00	3.80	43.30
1958/59			
Road Densities	59.70	41.70	451.20
Rail Densities	2.10	3.50	129.20

Note: Road and rail densities refer to kilometers per thousand square kilometers of geographic area.
Sources: Peemans (1975a, p. 203);
Central Bureau of Statistics (1959, pp. 166-69);
Grajdanzev (1942, p. 118);
Taiwan Statistical Data Book 1964.

anti-colonial Socialist Party a role in government. A detailed ten-year plan for the colony was published in 1949, and implementation began the following year. It reflected what Vansina (2010, p. 173) called a "brand-new, Stalinist-like faith in social engineering and planning". Investment expenditures grew in real terms; estimates by Vandewalle (1966, p. 144) show that they more than doubled between 1948 and 1956, and were well over 30 per cent of GDP in the early and mid-1950s. There was a considerable expansion of the road network and by the late 1950s road densities were higher than in Indonesia. They were much higher than in the islands outside Java, where, with the partial exception of Sumatra, the development of transport infrastructure was very limited until the end of the colonial era and into the 1950s (**Tables 2 and 3**). In the Belgian Congo, both agricultural and mineral exports increased, and per capita GDP grew quite rapidly in real terms between 1951 and 1956 (**Table 1**).

But neither the Belgian Congo nor Indonesia, nor even densely settled Java, can compare with the infrastructure legacy left by the Japanese in Taiwan. By the late 1930s, Taiwan's endowment of both road and railways was much higher than in either the Congo or Indonesia. In spite of the further progress in the Belgian Congo after 1950, Taiwan was still ahead by 1960. It was also well ahead of densely settled Java, where the Dutch had constructed more roads and railways than elsewhere in the archipelago (**Table 3**). The road, rail and irrigation networks in Java were developed in part to serve the sugar industry, but after 1900, with the introduction of the ethical policy, Dutch officials stressed the role of irrigation in facilitating double cropping of rice land. Irrigation development was also given priority by the Japanese, and by 1935 it was estimated that 78 per cent of land under rice and sugar was irrigated (Myers and Yamada 1984, p. 438). This was a much higher proportion than on Java, let alone the rest of Indonesia. As in much of the rest of Africa, there was little development of irrigated agriculture in the Belgian Congo.

Agricultural Development: The apparently robust growth performance of the Belgian Congo in the final decade of colonial rule masked some worrying trends, especially in the agricultural sector where most Congolese derived their income. Indigenous agricultural production of both food and non-food crops did increase between 1949 and 1958, but in per capita terms the growth was modest (Vandewalle 1966, p. 113). Much of the growth in agricultural exports came from European companies. The traditional agricultural sector experienced little or no productivity growth in terms of output per hectare. Although there was a considerable growth in area under cultivation of food crops between 1929 and 1956, only in the case of manioc (cassava) was there any growth in output per hectare. For most other crops output per hectare fell, which suggests that the growing population was forced on to less fertile land (Peemans 1997, pp. 52–54).

Peemans (1997, pp. 52–3) contrasted the performance of agriculture in Zaire with that of Taiwan under Japanese rule, when a 'green revolution' in rice agriculture (based on the high-yielding ponlai rice varieties developed in Japan) was successfully transferred to Taiwan. From the 1920s onwards, the Japanese developed the rice sectors in both Taiwan and Korea to supply markets in

Table 3: Population Densities and Road and Rail Densities: Taiwan, Indonesia and Zaire, c. 1960

Country	Population Densities	Rail Densities	Road Densities
Indonesia			
Java	488.70	34.70	217.80
Sumatra	32.70	4.10	57.80
Other Islands*	14.10	-	17.40
Other Islands**	19.20	-	24.70
Belgian Congo	7.20	2.10	59.70
Taiwan	300.10	129.20	451.20

* Refers to Kalimantan, Sulawesi, Maluku, Bali, and West and East Nusa Tenggara, and West Irian.
** Excludes West Irian.
Note: Population densities refer to people per square kilometer; road and rail densities refer to kilometers per thousand square kilometers of area. Data for the Belgian Congo refer to 1958/9; for Indonesia to 1962.
Sources: Peemans (1975a, p. 203); Central Bureau of Statistics (1963, pp. 186–88); Taiwan Statistical Data Book (1962, pp. 3–5; 59–61).

metropolitan Japan; after 1925 the two colonies supplied between ten and twenty per cent of total Japanese rice consumption (Ka 1995, p. 135). Taiwan had also become an important supplier of sugar to the Japanese market. Rice exports were grown by smallholders; the sugar was cultivated both by smallholders and on land purchased by large Japanese companies. Ka (1995, pp. 144–45) has argued that the growth of the sugar industry did not confer much benefit on Taiwanese producers, whose incomes remained low; it was only after the surge in rice exports in the 1920s and 1930s that rural household incomes increased.

In Indonesia, the Dutch were not as successful as the Japanese in increasing output per hectare in rice agriculture, although investment in irrigation did lead to growth in double-cropping. Perhaps the most dramatic success story in smallholder agriculture under the Dutch was the rapid expansion of rubber cultivation in Sumatra and parts of Kalimantan. Smallholders had already overtaken estates in the production of coffee, and by the late 1930s, they accounted for almost half of total rubber production (Creutzberg 1975, p. 94). After 1950, the share of estate production fell further. The success of smallholder export producers in crops such as rubber, coffee, pepper and coconuts in Indonesia mirrored similar success among small holder producers of cocoa and coffee in parts of West Africa, especially Ghana and the Ivory Coast. But there was no similar take-off for smallholder producers of export crops in the Belgian Congo. The reasons are complex, but Clarence-Smith (2013) has argued that the *laissez-faire* policy of the Dutch towards smallholder development contrasted with the 'heavy-handed dirigisme' of the Belgian authorities, which prevented smallholder cultivation even in those regions well served by road and river transport.

The failure to increase agricultural productivity was especially serious because, in spite of the low population densities in much of the Belgian Congo, the amount of cultivated land per agricultural worker was actually quite low. Peemans (1997, pp. 167–70) presents estimates of the growth in cultivated area between 1934 and 1958; although cultivated area expanded over these years relative to numbers of agricultural workers, the amount of land per agricultural worker (male and female) in 1958 was lower than in densely settled Java (**Table 4**). The difference was due to the much higher cultivation ratios; in Java by the early 1960s over 60 per cent of the geographic area of the island was under smallholder cultivation (Central Bureau of Statistics 1963b, p. 66). In the Belgian Congo only about one per cent of the geographic area was under smallholder cultivation, while around five per cent of the land was alienated to private companies, missions and settlers. Were there biophysical, legal or other constraints which prevented further extension of the cultivation frontier in the Congo?

In Taiwan, planted area per agricultural worker was about the same as in Java and considerably higher than in the Belgian Congo in 1938 (**Table 4**). By 1958, planted area per worker had increased in Taiwan to over one hectare, which was higher than in both Java and the Congo. Given that output per

Table 4: Area Cultivated by Peasant Households per Agricultural Worker, 1934 and 1958 (Hectares)

Description	Congo	Java	Taiwan
1934			
Cultivated area per male agricultural worker.	0.76	1.09	n/ a
Cultivated area per agricultural worker.	0.35	0.83	0.82
1958			
Cultivated area per male agricultural worker.	1.17	0.86	n/ a
Cultivated area per agricultural worker.	0.43	0.65	1.09

Note: Data for Java refer to 1930 and 1961; area cultivated refers to harvested area of all crops grown by smallholders.

Sources: Peemans (1997, p. 168); Central Bureau of Statistics (1947: Tables 54); Central Bureau of Statistics (1963a, p. 67); Central Bureau of Statistics (1963b, pp. 33–35); Hayami Ruttan and Southworth (1979), Appendix Table T4.

planted hectare was higher in Taiwan, there can be little doubt that productivity per agricultural worker was higher. Critics of Japanese agricultural policy in Taiwan, including Ka, have argued that living standards in the rural economy only began to improve after 1925, as a result of the increased output of rice, and the reduced emphasis on sugar cultivation. This may be true, but on balance indigenous agricultural producers seem to have fared better than in other colonial territories, or indeed in mainland China, up to 1960.

Education: The Japanese have been given considerable credit for expanding educational opportunities for indigenous Taiwanese during their occupation of the island. Certainly the ratios of school enrollments to total population calculated by Furnivall (1943, p. 111) showed higher enrollments per population in Taiwan than in any other colony except the Philippines. Frankema (2011: Table 2) shows that gross enrollment ratios in recognized primary schools were slightly higher in Taiwan than in the Philippines, and much higher in these two colonies than elsewhere in Southeast Asia. But the education system in Taiwan was hardly the equivalent of that in Japan. Tsurumi (1984, p. 308) argued that in spite of impressive educational enrollments at the primary level by the late 1930s, the goal of Japanese policy was to 'fashion the lower track of the two-track Meiji education system'. There were few opportunities for bright young people to progress even to middle schools, and tertiary education, usually in Japan, was only available to a privileged few. But the situation in much of the rest of Asia and Africa was worse.

In the Belgian Congo, the expansion in education which took place after 1908 was largely driven by Catholic missionaries. The Belgian administration was keen to expand access to primary education on the cheap, and mission education was largely paid from non-government sources. Between 1908 and 1938 school enrollments increased more than twelve-fold (Frankema 2013: Table 7.1). Most Congolese had few worries about sending children to Christian schools, in contrast to those parts of western Africa where Islam was the dominant religion. Frankema has shown that, in spite of the fact that government spending per capita and per student on education in Indonesia was higher than in the Belgian Congo between 1910 and 1940, enrollments were higher in the Belgian Congo.

Thus by 1950, gross enrollment rates for children aged 5 to 14 in the Belgian Congo were higher than in most other colonial territories in Africa, either British or French. By 1960, 36 per cent of children aged 5 to 14 were enrolled in school which was a higher proportion than the average for British colonies in Africa, and in all French colonies except the Cameroons (Frankema 2011: Appendix Table 1). In Indonesia, the newly independent government did try to accelerate school enrollments after 1950, and by 1970 gross primary enrollment rates had caught up with what was then Zaire. After 1970 Indonesian rates increased while those in Zaire fell (Frankema 2013: Figure 7.3). But all three former colonies suffered from a lack of skilled workers with secondary and tertiary qualifications in the post-independence decades. In Taiwan, this lack was used by the mainland Chinese, who streamed into the island after 1949, as an excuse for their continued domination in the upper echelons of the civil service, as well in private sector firms and the professions. In both Indonesia and the Belgian Congo, the lack of trained people caused considerable problems after the transfer of sovereignty in 1949 and 1960 respectively.

Demographic Change, and Employment: Most colonial governments in Asia, and increasingly in Africa, were by the early 20th century devoting considerable administrative effort to enumerating the populations of their possessions. Accurate data were necessary for collecting taxes, and also for monitoring the health and welfare of indigenous populations. In both Taiwan and Indonesia, as in other parts of South East Asia, populations were growing quite rapidly. In Taiwan, Sato et al. (2008, p. 233) estimate population in 1898 to have been 2.69 million; by 1943 this had increased to 6.36 million. This rapid growth (almost two per cent per annum) was in part the result of higher birth rates, although the most important factor was a sharp decline in mortality, especially after 1920. Infant mortality in particular fell sharply and by the late 1930s was lower than in most other parts of Asia (Booth 2012: Table 4).

Reliable population data for the Netherlands Indies before 1900 only exist for Java. While there has been debate about how fast population grew over the 19th century in Java, there is little doubt that it did increase. Boomgaard and Gooszen (1991, p. 82) estimate that by 1900 population was 30.4 million compared with 7.5 million in 1800. The reasons for this growth have been debated among historians; some have argued that the system of forced cultivation in the middle decades of the 19th century encouraged Javanese to have more children, while others have stressed public health measures including vaccination against smallpox (Boomgaard 2003). Outside Java, where the Dutch presence was far less developed, population growth may well have been slower, although by the late 19th century out-migration from Java was already affecting population growth in southern Sumatra.

By the dawn of the 20th century, Dutch officials considered population growth as a major cause of what was viewed as "declining welfare" among the indigenous population in Java. It was widely thought that Java could not accommodate more labour in agriculture, where a high percentage of the geographic area of the island was already cultivated. One solution was to move large numbers of Javanese to other parts of the archipelago, where there appeared to be abundant supplies of "empty land" and also growing demand for wage labour on agricultural estates. The transmigration program was a key part of what became known as the ethical policy, and has continued, with varying degrees of government support, down to the present day. The policy of moving indentured labour from Java to the estates in North Sumatra was more controversial, and as will be seen below, was reformed after considerable public protest.

Another consequence of the expansion of "welfare services" after 1900 was the growth of Indonesian employees in the government sector. By 1930, when the population census of that year also included a detailed breakdown of the labour force, over 90 per cent of employees in government and the professions were indigenous Indonesians, which was a higher percentage than in any other South East Asian country except the Philippines, and independent Thailand (Booth 2007, p. 127). It was higher than in Taiwan where about half the workers in government were indigenous Taiwanese. In all these colonies except the Philippines, the senior positions in the civil service would still have been occupied by people from the metropolitan country, but the extent of indigenous participation in the colonial administrative services in many parts of Asia was substantial, and often underestimated. After the Japanese occupation of Southeast Asia, many indigenous employees were promoted into more senior positions, where they remained after political independence.

To many observers of colonial policies across Southeast Asia, the rapid growth of indigenous populations, and their increasing employment in a range of non-agricultural occupations, was evidence of the benign effect of colonial policies. Certainly the demographic situation contrasted with the Belgian Congo where population declined over the 19th century. The extent of the decline is contested; there does not seem to be any evidence to support the assertion made in 1919 that the population had been reduced by half (Vansina 2010, p. 127). But the advent of traders from both West Asia and Europe over the 19th century brought diseases for which the local populations had little resistance; in addition the spread of venereal diseases made many women infertile. St Moulin (1990, p. 300) has argued that there was a significant decline between 1880 and 1920, followed by stagnation until 1945.

Thereafter population growth accelerated to over two per cent per annum, and it has remained high until the present day. The 1950s have been described as golden years in the Belgian Congo by Peemans, especially for wage workers who experienced a doubling in real wages (Peemans 1975b, p. 152). The greater prosperity, combined with more government spending on public health measures would have contributed to both higher fertility and falling mortality. In addition in the last decade of the Belgian colonial era, urbanization accelerated, and more indigenous Congolese were recruited into government occupations. By 1960 there was an embryonic urban middle class, eager to step into the jobs of the Belgian administrators, who in turn were under increasing pressure to transfer power to the indigenous majority.

2.2. Aspects of Colonial Exploitation: Taiwan, Indonesia, and the DRC

Those who have argued that most colonial systems were coercive and exploitative rather than developmental have used a variety of arguments to support their case. In general terms, colonial exploitation can be defined as any policy pursued by a colonial power which was designed to benefit the metropolitan economy, particularly through remittance of funds on either government or private account, or through securing new markets for products produced in the home economy. But other definitions have also been suggested. Landes (1961) argued that a useful definition would link colonial exploitation to coercion, which leads to the employment of labour at wages less than would prevail in a free market, or the purchase of products at prices lower than would obtain in free markets. According to Landes, colonial exploitation must imply non-market constraint. This is a definition which has in fact been widely used in the literature in the decades since Landes suggested it; its relevance to the three colonies under discussion will be evaluated below.

A further definition of colonial exploitation concerns the burden of taxation. Many pre-colonial governments in Asia and elsewhere taxed their populations heavily in labour and kind, as well as in money. Some defenders of European colonialism in Asia have argued that it brought about a rationalisation and lowering of tax burdens on the local populations, and thus curtailed the predatory nature of the state. But others have argued that colonialism simply replaced one form of fiscal predation with another. It has been argued that the imposition of cash taxes was frequently used as a means of forcing indigenous cultivators into the wage labour market, or into producing crops for sale. Following Landes, it has been argued that when workers were forced into wage labour to pay taxes, the wage rates were manipulated to benefit the main employers of labour, often large corporations domiciled in the colonial metropole. If they grew crops for sale, prices were often depressed below world market levels by export taxes or state marketing boards.

Heavy taxation of indigenous populations could be justified if colonial governments used the revenues from taxes and other sources to provide infrastructure, education, health care and other modern services, which pre-colonial governments had neglected or been unaware of. Many studies in both Asia and Africa have stressed that colonial governments spent few resources in any of these areas. Infrastructure spending, when it took place, was usually skewed towards roads, railways and ports required by foreign enterprises in order to export agricultural and mineral products. For a range of reasons little was done to provide either education or modern health services to indigenous populations; schools, hospitals and clinics where they existed, were frequently provided by missions. As we have seen, these arguments have some validity in the context of the three colonies. But to what extent were policies pursued that were more deliberately exploitative?

Coercive Control of Labour and Land: From the outset, Leopold's system in the Belgian Congo consisted of two key policies; control of land and mobilization of labour (Peemans 1975a, p. 169). His administration enacted a decree in 1885 which established the right of the state to dispose of all lands that were not effectively occupied by African tribes'. Some Belgian officials may have been aware that indigenous agriculture was based on shifting cultivation and hunting, both of which required large amounts of land which would not necessarily have appeared 'occupied'. But the 1885 decree gave foreign colonists legal sanction to take over these lands. As in Java in the 1830s, Leopold's plans for accelerating export growth in the Congo also depended crucially on mobilization of labour. The second part of Leopold's system was to create a legal framework which 'allowed the state to mobilize the potential labour force by authoritarian means' (Peemans 1975a, p. 170). In the Lower Congo, trading activities were already well established, based on palm oil and kernels; traders bought the merchandise from African cultivators and state revenues from these products were derived through export taxes. This system was broadly similar to that implemented in Indonesia, and in parts of West Africa.

But in the newly occupied lands beyond Leopoldville, the government's sights were set on increasing production of three valuable products, rubber, ivory and copal. There was no expectation that African producers could produce and sell these products in the desired quantities through the market mechanism alone. The system which was used was to coerce Africans into producing rubber through taxes in labour and kind combined with coercion and terror where necessary (Peemans 1975a, pp. 170–4). Rubber exports increased from zero in 1887 to over five thousand tons in 1902, which was more than Indonesia was exporting at that time[5]. But after 1903 a press campaign was launched in Belgium and England which exposed the abuses of the system of forced cultivation. In addition it was argued that, given the labour constraints, it was pointless trying to wring more output from what was in many regions still a hunter-gatherer economy.

These pressures led to the demise of the Congo Free State, and the Belgian government's assumption of direct responsibility as a colonial power. But policies did not undergo a dramatic change after the termination of the Free State. Coercive labour recruitment continued both for cultivation of crops and for public works projects. The Ordinance of 20 February 1917 imposed 60 days annually of obligatory cultivation of the crops decreed by the government agricultural services (Young 1994, p. 253; Vansina 2010, pp. 214–5). Penal sanctions were imposed if the crops were not cultivated. Money taxes were also levied on the African population, not just to raise revenues but to force workers into the wage economy. This was at a time when Dutch officials were concerned that indigenous populations in Java and elsewhere could not bear increased tax burdens. As mineral exports surged ahead of agricultural exports after 1920, mines became important employers of labour. Peemans (1975a, p. 176) argued the tax system played a crucial role in creating a labour market characterized by migration and high turnover[6].

The growth of the copper mining industry in Katanga posed particular problems because this was a region which was lightly populated. Merlier (1962, pp. 133–35) describes the means by which male workers were mobilized to work in the mining sector which by 1939 employed 231,000 men out of an estimated wage labour force of 530,000. This was estimated to be around 21 per cent of all adult males in the Congo. The growth in the wage labour force meant that over time, more and more Africans were living outside the traditional economy, many in urban areas or mining camps. Traditional agriculture lost large numbers of young adult males, who moved in search of wage work. After mining, the largest labour force was in estate agriculture, whose growth was facilitated by large-scale land alienation. Between 1885 and 1944, 12.1 million hectares of land was legally alienated to private companies, missions and settlers (Peemans 1975a: Table 31). This amounted to around five per cent of the total land area of the Belgian Congo.

Land alienation occurred on a larger scale in the Belgian Congo than in most parts of Indonesia, where in 1940 around one per cent of the total geographic area was leased to agricultural estates, and a smaller area to mining companies. The proportion of land leased to western enterprises was much higher in densely settled Java than in outer Indonesia; in the late 1930s, it was around 7.4 per cent of the geographic area of Java, which is higher than the figure for the Belgian Congo[7]. A decade

[5]In 1905 exports of rubber from Indonesia amounted to only 25 tons (Creutzberg 1975, p. 93). Production in British Malaya was already 57,000 tons in 1905 and almost doubled over the next five years (Barlow 1978, p. 442).

[6]Peemans (1975a, p. 175) estimates that before 1940, poll taxes absorbed between 20 and 60 per cent of the annual cash incomes of the African population. He does not give an estimate of cash incomes as a proportion of total; one assumes this must have varied considerably across the Belgian Congo. Further analysis of the impact of cash taxes on labour market participation is given in Nelson (1994, p. 129).

[7]Figures taken from Central Bureau of Statistics (1947, p. 36).

earlier the percentage would have been higher, as almost 200,000 hectares of rice land in Java was rented to the sugar companies by smallholders, often under duress. The decline in the sugar industry in Java over the 1930s is often seen as a boon for smallholder cultivators of foodcrops, although demand for wage labour fell. By the 1930s, competition for land had become acute in densely settled Java, where it was obvious that the growing population could no longer be accommodated by extending the land frontier. Many in the rural population were cultivating very small plots of land, or were landless, and depended on wage labour for much of their income.

In the estate and mining areas outside Java, the large agricultural and mining companies faced the same problems of labour shortages as in the Belgian Congo. As in neighbouring British Malaya, the Dutch colonial authorities at first looked to China for workers, but from the early 20th century, official policy was to encourage Javanese to move to Sumatra, which they did in large numbers. By 1928, it was estimated that 446,000 coolies were employed on estates outside Java, of which 251,000 were indentured workers on the east coast of Sumatra. Over 100,000 indentured workers were employed in other locations outside Java (Booth 1998, p. 296). The treatment of indentured workers was often harsh, and the Dutch were forced to tighten rules regarding their treatment. In 1931, the Coolie Ordinance was abolished altogether, and from then on all migrant workers were classified as free. Even though job opportunities contracted on the estates with the advent of the depression, most Javanese stayed on, as there were few employment opportunities back in Java. The government imposed a tax on importing Chinese workers in 1931, which brought migration from China to a halt, but by then Chinese workers were only about 12 per cent of all coolies working on estates (Central Bureau of Statistics 1947, p. 65).

The remarkable growth in smallholder cash crop cultivation in Indonesia in the last five decades of the Dutch colonial era has been much studied. By 1940, an estimated 730,000 hectares were planted by smallholders to rubber, and 176,000 hectares to tobacco. Smallholders were also important cultivators of tea and coffee, pepper and coconuts (Creutzberg 1975). Much of the expansion in area under rubber took place outside Java, although smallholder tobacco cultivation took place mainly on Java. While the large rubber estates were hardly supportive of smallholder cultivators, especially after production restrictions came into force in the 1930s, they were largely powerless to prevent the spread of cultivation outside the areas they controlled, which were mainly in North Sumatra. By the late 1930s, palm oil was the only important export crop which was entirely grown on large estates.

In Taiwan, there were similarities with Java in the competition between subsistence and cashcrops for the arable land. By the 1930s, the average amount of land per agricultural worker was similar in the two regions, and Ka (1995, p. 152) has argued that land fragmentation was accelerating, especially on rice land. Ka (1995, p. 147) also estimated that by 1939, Japanese interests controlled 13.2 per cent of the arable land in Taiwan (10.2 per cent of paddy land and 18.8 per cent of dry land). Much of this was land used for sugar cultivation; by the late 1930s, almost 14 per cent of arable land in Taiwan was used for sugar, which was a much higher proportion than in Java in that year. The sugar industry in Taiwan was not very efficient by international standards, but output was sold almost entirely into the protected Japanese market. Output grew rapidly, especially as the Japanese became more obsessed with food self-sufficiency in the 1930s. The land controlled by the sugar companies continued to expand until 1940 (Ka 1995, p. 99).

Extraction Through the Fiscal System: By the late 1930s, the fiscal system in the Belgian Congo had developed to a point where revenues in per capita terms were roughly similar to French West Africa and the Sudan (controlled by the British) but lower than in other parts of Africa and lower than in Indonesia, or indeed any other Asian colony except Vietnam (Table 5). Earlier in the 1930s, the world depression affected tax receipts and the Belgian government was forced to grant a 'metropolitan subsidy' to the colonial government, which in 1934 and 1935 amounted to more than 30 per cent of total budgetary revenues, although this was reduced as the economy recovered towards the end of the decade[8]. Reliance on customs and excise

[8]See Coquery-Vidrovitch (1985, p. 359) for an argument that between 1914 and 1935 the Congo cost Belgium a substantial

Table 5: Budgetary Revenues per Capita, c. 1938: Africa and South East Asia (US$)

Country	Value	Country	Value
Kenya	6.00	SS	30.00
Northern Rhodesia	6.00	FMS	17.00
Gold Coast	5.00	Taiwan	12.00
Angola	3.00	UMS	10.00
Uganda	2.50	Philippines	5.00
Belgian Congo	2.50	Burma	4.00
Sudan	2.00	Indonesia	4.00
Nigeria	2.00	Thailand	3.50
FWA	2.00	Vietnam	1.50

SS = Straits Settlements; FMS = Federated Malay States;
UMS = Unfederated Malay States; FWA = French West Africa.
Sources: For Asia, see Table 1. Africa: Naval Intelligence Division (1944, p. 448); Gold Coast: Kay and Hymer (1972: Table 23); Nigeria: Helleiner (1964, p. 429; 557).

duties remained high, at around 30 per cent of total revenues (Table 6). The incidence of these duties would have fallen largely on Europeans and Africans consuming imported commodities, but the native poll tax fell on the great majority of African households, who paid either in cash or kind. This amounted to around 15 per cent of budgetary revenues in 1937 (Moeller 1938, p. 117).

There was also an income tax, which fell on both Europeans and Africans earning more than an income threshold, which was set higher for Europeans than for others. A range of license and permit fees fell on small traders, most of whom were African (Naval Intelligence Division 1944, pp. 436–39). Revenues from taxes and other fees together with the metropolitan subsidy covered ordinary (mainly administrative) expenditures but in addition government borrowing accelerated after 1908. Some of this borrowing was in effect investments by government in private companies in the colony which were charged with developing both infrastructure and directly productive enterprises. By 1937, the total debt outstanding was estimated at 6.65 billion francs (around 45 million pounds). Most of this was 'extraordinary debt' for major projects, including interest guarantees to utility companies (Moeller 1938, p. 137). Debt service payments amounted to around one third of total budgetary expenditures in 1937, which was twice the percentage in Indonesia (Table 6).

In Indonesia, government revenues per capita increased between 1910 and 1929, but fell back in the 1930s (Booth 2007, p. 73). After the ethical policy was introduced in 1901, and especially after the end of the first world war, when inflation accelerated, the Dutch colonial authorities were increasingly concerned about the burden of taxation on the native population. Several studies were carried out in both Java and the outer islands, which led investigators to conclude that most indigenous Indonesians, especially those in rural areas, were already being taxed to the limit (Penders 1977, pp. 91–96). Over the last two decades of Dutch rule, there was an attempt to diversify revenues; taxes on both personal and corporate incomes increased, and by the late 1930s they accounted for over 20 per cent of total revenues. Land taxes, whose incidence fell largely on native cultivators fell to only around seven per cent of total government revenues by the late 1930s.

In Taiwan, revenues per capita were considerably higher than in most other colonies in Asia, with the exception of British Malaya (Table 5). In 1913, total revenues were rise to 22 per cent of GDP, and they remained at roughly 20 per cent of GDP until 1938 (Mizoguchi and Umemura 1988, p. 232; 288). As in other Asian colonies, revenues in Taiwan were derived from a range of tax and non-tax sources, including revenues from monopolies (salt, opium, tobacco and alcohol). Income and inheritance taxes were levied, but were a small proportion of total revenues. Grajdanzev (1942, p. 135) argued that 80 to 90 per cent of all tax revenues fell on the mass of the population and only 10 to 20 per cent on the wealthier groups including Japanese individuals and corporations. He cited an official investigation of farm incomes in Taiwan carried out

sum. These metropolitan grants allowed the colony to take off after the world depression eased in the latter part of the 1930s.

Table 6: Budgetary and Trade Indicators Compared: Netherlands Indies and the Belgian Congo, 1937

Indicator	Belgian Congo	Netherland Indies	Taiwan
Exports Per Capita (Pounds)	1.66	1.60	5.17
Budget Expenditures Per Capita (Pounds)	0.48	0.82	1.67
Budget Revenues Per Capita (Pounds)	0.35	0.76	2.16
Trade Taxes as % of Exports & Imports	4.40	5.50	0.32
Trade Taxes as % of Total Revenues	30.30	17.10	1.27
Exports as a Ratio of Imports:			
1929	1.21	1.30	1.45
1937	2.27	1.91	1.48
Debt Service Payments (as a Percentage of Total Expenditures)	33.80	16.10	n/a
Cumulative Balance of Payments Surpluses (as a Percentage of Cumulative Exports, 1920-38)	(7.40)	3.70	15.60

Sources: Belgian Congo: Naval Intelligence Division (1944, p. 249; 414; 436), Moeller (1938, p. 117; 137); Vandewalle (1966, pp. 75–79); Indonesia: Creutzberg (1976: Tables 1 and 4); Korthals Altes (1991: Tables 1B, 2B); Central Bureau of Statistics (1947); Taiwan: Mizoguchi and Umemura (1988, pp. 247–95).

in 1936 which found that direct taxation of farmers was twice as high as in Japan itself. Land taxes were levied by both the government-general and local authorities, and amounted to almost ten per cent of total revenues.

By the 1920s and 1930s, head taxes were either not levied at all in most parts of Asia, or had been reduced in size. Only in independent Thailand did they account for more than five per cent of total revenues. This contrasts with many African colonies where head or hut taxes were often assessed on rural populations. In spite of their declining importance in total revenues in the Belgian Congo, it was argued that the native poll tax was a heavy burden on the indigenous population. The burden was lighter in the Lower Congo, but elsewhere the tax forced many young men to seek wage employment; as was pointed out above, this was an important reason for assessing it. In addition to the poll tax, a range of other taxes and charges would have fallen mainly or entirely on the African population. These included customs and excise duties, and licenses and permits for a range of activities (Naval Intelligence Division 1944, p. 445).

Without information on incomes for different groups in the expatriate and indigenous populations, it is impossible to determine whether tax burdens were higher in Asian colonies, including Taiwan and Indonesia, compared with Africa. What does seem clear is that for much of the 1930s government expenditures exceeded government revenues in both the Belgian Congo and Indonesia, leading to an increase in government borrowing. By contrast in Taiwan, the government budget was in surplus continually from 1899 onwards. Even allowing for increasing expenditures on government capital formation, the budget surpluses in Taiwan were both substantial and sustained. It would appear that this was an important factor contributing to the sustained balance of payments surplus, of which more below.

Extraction Through the Balance of Payments: One issue which has triggered a very large literature in the context of India, as well as in other colonial territories concerns the "drain" of capital out of the colony through the balance of payments[9]. The argument is quite straightforward; metropolitan powers held back colonial development by implementing policies which led to substantial surpluses on the current account of the balance of payments, which in turn financed outward flows of capital. The surpluses were the result of large surpluses of commodity exports over imports, which were not compensated by imports of services. Beginning with the large outflows from Java to the Netherlands during the culture system (1830 to 1870), it has been argued that many colonial governments pursued policies which led to persistent balance of payments surpluses. In the case of Java, the remittances consisted mainly of government to government transfers, which amounted to as much as eight to twelve per cent of Java's GDP in the 1850s. During this decade the remittances amounted to 3.8 per cent of Dutch GDP, and one third of the

[9]For an analysis of the Indian debate, see Mukerjee (1972).

Dutch state budget (van Zanden and Marks 2012, pp. 50–51). After the system was terminated, balance of payments surpluses vanished until the end of the 19th century, but grew again after 1900, when they were largely the result of private sector remittances.

Many nationalist leaders argued that these large export surpluses were evidence of "colonial exploitation". Even where it could be demonstrated that the surpluses on the current account of the balance of payments were smaller than the trade balance, or even negative because of large deficits on services, the counter argument was that the service sector in most colonies was dominated by firms from the metropole, who often had monopolies over the provision of shipping, banking, insurance and other services and charged high prices. These debates continue in studies of the economic history of many parts of Asia and Africa, but a consensus does appear to be emerging that at least some colonial economies did experience significant outflows of capital which were in part at least the result of large profits earned by companies based in the metropolitan power. Certainly the major European colonial powers in the late 19th century often behaved as if they thought the chief function of colonies was to bring wealth to the metropolitan powers, which is why they were so reluctant to see their European rivals (especially Germany) acquire more overseas possessions.

By the early 20th century, colonial rhetoric was changing but this did not necessarily lead to changes in practice. In Indonesia, in spite of the increased public expenditures associated with the ethical policies, the current account of the balance of payments was in surplus in most years from 1900 to 1928 (Korthals Altes 1987: Table 1). Even though there were deficits in the early 1930s, the cumulative balance of payments surpluses over the years from 1920 to 1938 amounted to almost four per cent of cumulative exports by value (**Table 6**). In Taiwan where the balance of payments was in surplus every year from 1915 through to 1938, the cumulative surpluses from 1920 to 1938 amounted to 15.6 per cent of cumulative export value. As was noted above, these large and persistent surpluses were partly the result of large surpluses on the government budget, although private remittances on the part of Japanese companies were also significant[10].

The Indonesian and Taiwanese experience contrasts with the Belgian Congo where the balance of payments was in deficit for most years from 1921 to 1933, although it was in surplus from 1934 to 1939, mainly because the value of commodity exports exceeded imports by a considerable margin (Vandewalle 1966, p. 77). In contrast to Taiwan and Indonesia, the government budget had been in deficit for most of the interwar period, necessitating borrowing on a large scale. To the extent that the balance of payments deficit was due to large expenditures on infrastructure, which required imported equipment and material, it could be argued that it reflected a developmental approach on the part of the colonial government. The counter argument was that most of the infrastructure was built to support mining and estate ventures from which the indigenous population derived little direct benefit.

Colonial Policies: A Summing Up When we examine policies in these three colonies in the last decades of the 19th century and the first four decades of the 20th century we are confronted with a paradox. If we look at 'developmental' policies such as infrastructure, education and agricultural development, then Japanese policies in Taiwan would appear to have been much superior to those in either Indonesia or the Belgian Congo. By the late 1930s, the majority of Taiwanese children were at least completing the primary cycle of schooling and had achieved basic literacy. Population was growing rapidly, in part at least because of a decline in infant and child mortality. There had been considerable investment in both roads and railways, as well as in irrigation. The Japanese had successfully disseminated the higher yielding ponlai rice variety among Taiwanese farmers, although much of the crop was grown for export rather than local consumption. Although the ethical policy in Indonesia stressed agricultural development, and the Dutch did invest substantially in infrastructure in Java, education lagged behind Taiwan, and the Philippines. Outside Java, there was far less investment in infrastructure, and in many regions, there was less road development than in the Belgian Congo. Educational development also lagged

[10] See Mizoguchi and Yamamoto (1984) for further discussion of sources of capital formation in both colonial Taiwan and Korea.

behind the Belgian Congo, mainly because of mission activity.

But if we examine some of the indicators of exploitation which have been used in the literature, including the coercive control of land and labour, extraction through the fiscal system and the drain through the balance of payments, Taiwan looks less impressive. Government revenues per capita were much higher than in most other parts of Asia and Africa, and a high proportion fell on indigenous Taiwanese. It is also striking that the colony ran large budget and balance of payments surpluses for most years between 1915 and 1938. The Japanese viewed the island as an offshore market garden whose main function was to provide food to mainland Japan. Japanese companies in agro-industry made large profits, which were remitted back to Japan. In Indonesia also, in spite of the aims of the ethical policy, remittances on private account through the balance of payments remained substantial except for a few years in the early 1930s. Only in the Belgian Congo was there a sustained fiscal and balance of payments deficit. While these deficits were not in themselves evidence of less 'exploitation' in the Belgian Congo, they do suggest that some of the more sweeping generalizations about colonial plunder there need to be modified.

2.3. The Economic Consequences of the Transition to Independence

Taiwan: As was stated at the beginning of the paper, both Taiwan and Indonesia had a troubled transition to independence after 1945. At the Cairo conference held in late 1943, a decision was made to retrocede Taiwan to China. The Cairo Declaration was not "a carefully prepared State Paper but rather a promise to divide the spoils, dangled before the wavering Chinese" (Kerr 1965, p. 25). President Roosevelt was worried that the government of Chiang Kai-shek would strike a deal with the Japanese which would at the very least make China neutral in the struggle between the USA and Japan. The Cairo agreement may have kept China on side with the allies, but it sealed the fate of Taiwan. Developments in the island after 1945 has been described in detail by Kerr; the once prosperous colonial economy was wrenched away from the Japanese mainland and opened up to predatory businessmen and bureaucrats from China. Real gross domestic product in 1945 has been estimated to have been only 30 per cent of the 1938 level and recovery was slow (Sato et al. 2008, p. 382). After the nationalist regime under Chiang fled to Taiwan in 1949, economic growth accelerated, but it was only in the late 1950s that real per capita GDP returned to the 1938 figure.

The Chiang government had to deal with a local population which was hostile and resentful, especially after the brutal suppression of dissent in 1947. Taiwanese were both more prosperous and better educated than most people on the mainland, but there were very few with tertiary qualifications. Those that had gained higher education in Japan were viewed with suspicion by the mainlanders who made up Chiang's circle of advisers. As a result mainlanders dominated the upper echelons of the government, while the local population relied on agriculture and the growing manufacturing sector for employment. The land reform implemented in the early 1950s gave ownership rights to many former tenant farmers, and created an agrarian structure characterized by small owner operated holdings. By the end of the 1950s, agriculture still employed around half the labour force, although its share of total output was much smaller. From 1960 onwards, the industrial sector was the motor which powered the remarkable growth of the Taiwanese economy; real output increased more than 10-fold between 1960 and 1980 (Sato et al. 2008: Table 7.2). Government and private investment accelerated, and by 1980, investment had increased to 30 per cent of GDP (Table 7).

What caused the rapid transformation of the Taiwanese economy? Most of the economic ministers recruited by Chiang after 1949 had been trained as scientists and engineers. They were cautious pragmatists, who worked reasonably well with the American "advisers" whose aid was crucial to Taiwan through the 1950s. They espoused an economic system which was characterized as a 'planned market economy' (Wang 2006, pp. 95-6). The private sector was seen as still weak, with few dynamic entrepreneurs among either the mainlanders or the indigenous Taiwanese. Government enterprises were expected to play a crucial role in industrialization as well as in financial services. The more far-sighted among the technocrats advising Chiang, such as K.T.Li, grasped the importance of building on the educational legacy left by the

Table 7: Investment Expenditures as a Percentage of GDP: 1955-2005

Country	1951	1955	1960	1965	1970	1980
DR Congo	27.50	31.90	15.10	20.30	22.50	42.50
Indonesia	n/ a	n/ a	14.10	15.10	20.40	27.80
Taiwan	10.50	10.10	15.50	16.40	20.70	30.00

Note: Figures refer to investment expenditures as a share of GDP (current prices).
Source: Heston, Summers and Aten (2012).

Japanese by expanding access to post-primary education, and gradually increasing university-level education. These technocrats also understood that a long-term industrialization strategy for Taiwan must focus on producing for the world market rather than for a small, protected domestic market. The export-led industrialization strategy which Taiwan developed in the 1960s was adapted over the next decades to the production and export of medium and high technology products, using the educated labour which was coming out of the country's secondary schools and universities in increasing numbers.

Indonesia: Indonesia also had a troubled transition to independence. After the Japanese surrender in August 1945 Sukarno and Hatta declared independence, but this was not recognized by the Dutch. They expected to return to their former colony and to continue to govern it under much the same conditions as prior to 1942. Like the French, and even the British, they failed to grasp the strength of nationalism across Asia in the post-1945 era. In Indonesia the nationalist leaders had gathered popular support during the Japanese occupation, and were determined to prevent a return to colonial control. Between 1945 and 1949, there was continual fighting between the Dutch army and the Indonesian republican forces, punctuated by negotiations which failed to meet nationalist demands. The fighting only ended when the Dutch were forced by outside, mainly American, pressure to concede independence in 1949. The Dutch were determined to safeguard their assets in Indonesia and in return for political independence imposed a financial agreement on the new republic which even the more moderate nationalists considered an infringement of sovereignty (Dick 2002, pp. 170–71).

Although there was some economic recovery in the years from 1950 to 1957, the forces of economic nationalism gained increasing influence. Government revenues in real per capita terms never returned to the level reached in the late 1930s (Booth 2013b). In late 1957 there were a number of takeovers of Dutch companies, most of which were subsequently nationalized (Lindblad 2008: Chapter VIII). After President Sukarno ushered in the era of "Guided democracy" in 1959, there was increasing emphasis on Indonesian socialism, with state-run enterprises given priority over those in the private sector. The next seven years were characterized by economic stagnation and mounting inflation which caused great hardship to most of the population. In the export-producing provinces outside Java there was increasing recourse to smuggling as the over-valued exchange rate and complex taxes on exports made exporting through legal channels unprofitable. In September 1965, a coup in which six senior generals were kidnapped and killed, apparently with the backing of elements in the Indonesian Communist Party, led to an army-engineered backlash against left-wing elements throughout the country. President Sukarno's position looked increasingly vulnerable, and in March 1966 he was forced to abdicate power in favour of a triumvirate led by a little-known officer called Suharto.

Faced with a shattered economy, Suharto recruited several American-trained economists from the University of Indonesia into key posts in the National Planning Board and the Ministry of Finance and other economic agencies. Western powers, led by the USA, were quick to come to the aid of a strongly anti-communist regime in the largest country in South East Asia. By 1969, inflation had been brought under control, and the government embarked on the first of a series of five-year plans. Emphasis was placed firmly on the agricultural sector. The Indonesian government was successful in transferring the new seed-fertiliser technology developed at the International Rice Research Institute in the Philippines to rice farmers in Java, and in some parts of the outer islands, especially Sumatra and Sulawesi. The irrigation networks developed by the Dutch were rehabilitated and extended, and fertilizers, particularly urea, were sold at subsidized prices. There was also considerable success in improving yields of corn, which was an important food staple in Java and in many parts of eastern Indonesia.

The implementation report of the first five-year plan reported that 22 per cent of plan expenditures had gone on projects in agriculture and irrigation (Department of Information 1974, p. 167). Although subsequent five year plans during the Suharto era gave less prominence to agriculture, rural infrastructure continued to be given priority, especially outside Java. After 1974, when the world price of oil increased rapidly, the government budget benefited from a growth in revenues from the oil company tax. These revenues were used to fund an ambitious school-building programme and a network of health clinics in both urban and rural areas. A family planning programme was also initiated, which led to rapid fertility decline, especially in Java and Bali. In addition the government devoted considerable funds to agricultural settlement schemes, which involved moving poor rural families from Java and Bali to newly developed land in Sumatra, Sulawesi, and Kalimantan.

From the beginning, the Suharto development strategy was not without its critics. Some saw the emphasis on irrigation and rice production, together with primary education and migration from Java as just a reprise of Dutch policies in the ethical period. Nationalists were worried about the new foreign investment law which seemed to be giving foreign companies very favourable treatment. During the oil boom era of the 1970s, the familiar "Dutch disease" problems emerged which affected non-oil traded goods producers in both agriculture and manufacturing. Tariffs and non-tariff barriers conferred high rates of effective protection on the manufacturing sector, and domestic prices of most consumer durables were well above international prices. The food crop sector was assisted through subsidies, but producers of export crops were squeezed by the real appreciation of the rupiah. While Suharto's technocrats were successful in restructuring the economy during the 1980s, and non-oil export growth accelerated, public discontent over corruption and nepotism increased. In particular the growth of large conglomerates, many of them owned by Indonesian Chinese, or by Suharto's family, were a target of resentment. While the World Bank and other development agencies praised the government for the rapid poverty decline and the growth of non-oil exports, many Indonesian felt that the benefits of economic growth were not equitably shared.

Zaire/The Democratic Republic of the Congo: The Belgian government, having stated that the Belgian Congo's transition to independence would take years, if not decades, reversed their policy in the late 1950s, and promised independence in 1960. Patrice Lumumba, a former employee of the post office, emerged as the politician with the most popular support, and became the first prime minister, but his anti-colonial and pan-African views made him suspect in the eyes of both the Belgian and American governments. Lumumba was dismissed from his post in September 1960, and brutally murdered in January 1961. The mineral rich province of Katanga seceded, and there was unrest in the army. Lumumba had appointed Joseph Mobutu, a former soldier and journalist, to the post of Chief of Staff of the Congo National Army in 1960; in November 1965 he seized power for the second time in a bloodless coup, following a power struggle between the incumbent president and prime minister. He was to remain in power until 1997.

There were obvious similarities between Mobutu and Suharto especially in their early years in power[11]. Both had learnt bitter lessons from the secessionist movements which broke out in Indonesia and the DRC in the early post-independence years and were determined to re-assert strong central control over dissident regions. Both were authoritarian rulers, impatient with political parties and anxious to concentrate power in their own hands. Both were strongly anti-communist and viewed by the USA as bulwarks against Soviet influence in their respective regions. Both also seemed willing to tolerate corruption among their close associates as the price for staying in power. In the latter part of the 1960s, Mobutu appeared to be setting the economy on the path of rapid economic growth; after a major devaluation and fiscal reforms the economy grew by ten per cent per annum from 1967 to 1970 (World Bank 1980, p. 4). After 1970 growth slowed but was still positive

[11]For more on the comparison between Suharto and Mobutu, see Booth (2013a, pp. 81–2) and Abbeloos (2013).

until the mid-1970s. Investment expenditures as a share of GDP increased again after a fall between 1955 and 1960 (**Table 7**).

Young and Turner (1985, p. 306) speak of a tidal wave of disaster which hit Zaire in 1974/75, triggered by the fall in world copper prices. The Mobutu regime appeared unable to deal with the problems which hit them at this time, although they were probably no more difficult than the policy dilemmas which Suharto's technocrats had to grapple with after the oil price fall in the early 1980s. Increasingly after 1975, Mobutu came to resemble Sukarno rather than Suharto, particularly in macroeconomic management. Most accounts of economic development in what became Zaire after the Mobutu seizure of power stress not just the mounting inflation and increasingly over-valued exchange rate, but also the continuing failure of the state to support smallholder agriculture. Admittedly the problems were formidable, given the huge area of the country and the light population densities in most parts of the country. The central importance of agriculture was well recognized in official circles; agriculture was a central plank in the "Mobutu Plan" launched in November 1977. But rhetoric was not translated into reality; the government commitment resulted in neither 'the practical allocation of state resources nor... policies offering inducements to villagers' (Young and Turner 1985, p. 310).

Young and Turner point out that the share of budgetary outlays going to agriculture had dropped to only one to two per cent in 1973/74, compared to four to five per cent in the late colonial era, itself hardly a high percentage[12]. And the impact of even these modest resources was doubtful. An agricultural credit scheme was established, but the criteria were strict and the procedures very bureaucratic. Few of those who got access to credit were actually farmers. The delivery of agricultural support services was hampered by poor maintenance of the rural road network. Government pricing policy also operated as a substantial tax on farmers; government policy was still focused on providing urban consumers with cheap food to avoid social and political unrest, and also as a means of holding down urban wages. These policies had their roots in the colonial era, but the Mobutu regime made little effort to change them; if anything the urban bias of government policy became more pronounced in the 1970s and after[13]. Peemans (1997, p. 274) gives a breakdown of the public investment program for the 1980s. Agriculture accounted for four per cent of total investment in 1981–83, rising to eight per cent in 1983–85 and 13 per cent in 1987–89. How much of this was actually implemented is unclear.

Some writers on Zaire during the Mobutu era and beyond blame class factors for the failure of economic reforms especially from the early 1970s onwards when per capita GDP began its decline. Peemans (1975b, pp. 163–5) drew attention to the emergence of a 'State bourgeoisie'; this class benefited from the enlargement of the state sector and the take-over of foreign trade and service enterprises. There were clear parallels with the Guided Democracy period in Indonesia, and the oil boom era of the 1970s, which saw an enrichment of a bureaucratic class in Indonesia who profited through its access to government revenues. But that class was not powerful enough to prevent the reforms of the 1980s, which were widely seen as benefiting the private sector, and especially the economically powerful Chinese business class. Suharto demonstrated considerable skill in balancing the competing demands of the state and private sectors in implementing reforms, although by the early 1990s private interests, including those of his own family, had gain the upper hand. The last decade of Suharto's period in power was marked by the growing power of large conglomerates, several of them controlled by members of Suharto's family and their business associates. But however predatory their behaviour might have seemed to many Indonesians, the impact on economic growth was hardly as destructive as in Zaire.

3. Conclusion

From the vantage point of the early 21st century, it seems clear that the divergence between the DRC,

[12]Gran (1979, p. 12) cites figures from an IMF report which confirm the estimates of Young and Turner.

[13]Young and Turner (1985, pp. 312–14) examine the case of coffee, where world prices increased rapidly after a frost devastated the Brazilian crop in 1975. The government imposed an export tax, and this combined with various illicit taxes meant that the farmers were getting less in real terms for their beans than before the world price increase. State pricing policy had a similar negative impact on palm oil producers.

Indonesia and Taiwan in the decades after 1960 was the result of decisions driven by three powerful and autocratic leaders, who shared a number of similar characteristics but who in the final analysis acted very differently when it came to implementing economic policies. In Taiwan, Chiang Kai-shek seems to have realized soon after 1949 that rapid economic growth was essential both to appease the restive indigenous population on Taiwan, and to strengthen the island's defences and ultimately to launch an invasion of the mainland, which remained his long-term goal. He was thus prepared to listen to advice from technocrats, and prevent the more egregious forms of corruption which had blighted his government on the mainland before 1949. His government was able to build on the achievements of the Japanese colonial era in agriculture, infrastructure and education, while at the same time ending the more exploitative aspects of Japanese colonialism. In place of the remittances to Japan in the pre-war era, Taiwan was the recipient of large amounts of American aid, which was used to import much-needed investment goods. Land reforms implemented in the early 1950s created a large number of owner-cultivators with strong incentives to improve productivity. After 1960, export-oriented manufacturing became the main driver of economic growth.

In Indonesia, Suharto also relied heavily on advice from a group of trusted technocrats in dealing with the economic problems inherited from the Sukarno era. The development strategy which was formulated over the 1970s built on the Dutch legacy, with its heavy emphasis on rural infrastructure, primary education and land settlement outside Java. During the 1980s, Suharto listened to the advice of economists in the Ministry of Finance and implemented a series of reforms which facilitated the rapid growth of non-oil exports. The momentum of economic growth was sustained until the crisis of 1997/98. But at the same time, Suharto was attracting considerable criticism at home and abroad for cronyism and nepotism. Large conglomerates emerged which were owned by his family and by ethnic Chinese with close links to Suharto. It was rumoured that the Suharto family were remitting large sums abroad, although such rumours were difficult to substantiate. After he left office in 1998, Suharto's name was often linked with that of Mobutu in popular discussions of corruption in the developing world, although the economic legacy he left behind was very different[14].

Why was the Mobutu legacy so bad? One explanation, which many post-1960 analysts have given, is that there was little positive in the colonial legacy on which a post-colonial regime in Zaire under Mobutu could build. Certainly it is true that Belgian colonialism has had a bad press in most discussions of Africa in the post-colonial era, with words like plunder and exploitation widely used. But this paper has argued that, in comparison with both Dutch and Japanese colonialism, the evidence that Belgian policy was brutally exploitative is rather questionable. At least in the inter-war years, the current account of the balance of payments was often in deficit, and tax revenues per capita were not especially high. The educational legacy, while probably weaker than in Taiwan, was better than in Indonesia, mainly as a result of mission activity. After 1950, the Belgian government embarked on a ten-year plan which achieved a considerable measure of success, especially in developing infrastructure.

How can we explain the failures over the 1970s and beyond which have blighted the performance of Zaire/Democratic Republic of the Congo? It may be true that, compared with either Taiwan or Indonesia, there were few qualified technocrats in Zaire to give advice. But would Mobutu have listened to advice, even if it had been available? Clearly leadership is crucial, especially when countries face hard decisions in the wake of external problems such as sudden terms of trade declines. That leadership was inadequate in the case of Zaire after the mid-1970s is obvious. In that sense, Zaire, now the Democratic Republic of the Congo, has been an unlucky country, in spite of its resource wealth.

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