Charting the Economy: Early 20th Century Malaya and Contemporary Malaysian Contrasts, by Sultan Nazrin Shah. Kuala Lumpur: Oxford University Press, 2017, 234pp. ISBN: 978 983 47 2014 8

Many of the contemporary socio-economic developments of a country are shaped by the historical progress of said country. Malaysia does not differ much from other colonised countries in that its demographic and economic growth are particularly transpired from its economic development in the past, but as a whole, it has experienced progressively improved socio-economic well-being and infrastructure following independence. Some states in Malaysia are less developed than others, somehow adhering to the historical development that was established by the British in colonial Malaya. For example, Kedah, Perlis, Kelantan, Terengganu and Johor—previously known as the Unfederated Malay States—on average, continued to record a lower per capita GDP of RM25,226 in 2018, while Perak, Selangor, Pahang and Negeri Sembilan (the Federated Malay States) had RM40,108 per capita GDP that year. The economic role played by the British would therefore seem to have provided a solid bedrock for continued employment and income generation in post-independence Malaysia.

This volume provides a compendium on the formulation of GDP and the evolution of Malaya's economy between 1900 and 1939. While some estimating of historical data is necessary in measuring economic performance, Sultan Nazrin Shah of Perak, the author of this volume, interprets Malaya's economic trends through linkages between the economic and population development in the past and in the present.

The book is divided into three main sections, discussing (1) the Malayan economy; (2) the methodology in estimating GDP used in the first forty years of the 20th century; and (3) pre-World War II Malaya in comparison to post-independence Malaysia.

The first chapter sets the stage by detailing the numerous obstacles encountered in obtaining accounts about British Malaya. These include: patchy statistical information, where up to 12 administrative units each compiled their own statistical reports;[1] unconvincing data quality; and inconsistency in data reporting over time. Taking all these difficulties into consideration, the author manages to carefully estimate GDP values by using data from various government documents, including financial statements of the respective states and population censuses that were available during the colonial period. He then transforms them into a computational format, making several modifications and assumptions along the way. Some proxies are also used where data were not available.

In the second chapter, the author elaborates on the imbalanced development of Malaya in terms of human well-being and capital creation among indigenous communities, despite the observance of progressive economic development through job and wage creation. Given the strategic location and the free port status of the Straits Settlements—Penang, Malacca and Singapore—the British gained

1 These were the Straits Settlements of Singapore, Penang and Malacca; the Federated Malay States (Perak, Selangor, Negeri Sembilan and Pahang); and the Unfederated Malay States (Perlis, Kedah, Kelantan, Trengganu and Johore).

handsomely from its commodity trade, and further expanded its influence over other states in Peninsular Malaya. With the acceptance of British control by the royal families in the Federated Malay States, tin mines were boosted rapidly with strong competition between Chinese societies. Meanwhile, economic activities in the Unfederated Malay States focused on traditional agriculture and fishing—except Johore, whose level of economic development was on par with that of the Federated Malay States, primarily due to its close proximity to Singapore.

Sabah and Sarawak (British Borneo), which supplied timber exports, were administered separately from 1841, and subsequently obtained independence from British rule by joining the Federation of Malaysia in 1963. These states retained control over matters related to immigration, education and the civil service, in contrast to the highly centralised states in West Malaysia.

The workforce in Penang and Malacca continue to be employed in the commercial sector. In contrast, the largest percentage of the Unfederated Malay States' workforce remains in the agriculture and fisheries sectors, and more so in comparison to the rest of Peninsular Malaysia.

Chapter 2 provides a thorough analysis of economic progress made in the period under study. In the early 19th century, tin mining was the main industry in Malaya, contributing over half of world output. The availability of tin also expanded the canned food industry in Europe. In light of this, the British government invested in 'managerial expertise and new technology' (p. 29) to transform the tin mining industry by including the usage of tin in road and rail construction. In 1912, Chinese firms handled most of the tin production, but by 1931, 'more than 65 per cent of production' was in the hands of the British (p. 29).

In the 1910s, rubber had emerged as an important export commodity for Malaya, alongside tin. Tin, however, unlike rubber, is not a renewable resource. The author details how Malaya became the world's largest rubber producer by the 1930s. The growing automobile industry in Western countries contributed to the demand for rubber, and European planters responded by investing substantially to boost the production of rubber. With rising government revenue from exports, more hard and soft infrastructure such as road and railway systems, education and healthcare were in turn developed to support 'tin-mining and rubber-growing' (p. 36) activities. This was also to ensure that the health and education of the colonial administration and their families were well taken care of, and that infectious diseases brought in by foreign workers were properly controlled.

The health of these industries were, however, very susceptible to external conditions. During World War I and the Great Depression, demand for tin and rubber was badly affected. Between 1914–18, the routes to and from Europe were inaccessible, and shipments of tin and rubber exports had to be redirected to the UK through the Panama Canal. Be that as it may, Malaya's GDP during this period was able to ease forward, given the 'consistent yearly increase of the average unit value of tin exported' (p. 34).

The Great Depression which loomed in 1929 affected the demand for tin and rubber. The drop in exports resulted in a high rate of unemployment and a huge reduction in wages for both industries. Many workers were also deported, and Malaya's GDP shrank by double-digit rates over three years, from 1930 to 1932.

One of the more valuable pieces of information found in this volume is the methodology used to construct Malaya's GDP at both current and constant prices before the Second World War, when the estimation of this must have been a difficult task (Chapter 3). The annual GDP series computed by the author along with its components over a period of 40 years before World War II, and shared in the appendices, is another fascinating treasure found in this volume. Having these data in this format is a rare gift, and extremely useful for further pre-war research.

Though lacking data availability, the author was able to estimate the historical time series of demographic and economic data from 1900 to 1939 by reconstructing the National Income Accounts for Malaya, with reference to the System of National Accounts, which was first developed in 1953. More importantly, the author also precisely lays out the methodology for calculating income accounts in order to estimate historical GDP, and he clearly details the expenditure components used in deriving GDP estimates—something otherwise not available in the literature.

Each expenditure component is first computed at current prices, followed by the estimation of GDP components at 1914 constant price through the use of a relevant deflator, such as wage rate index, consumer price index, producer price index, retail price index or import price index, depending on the type of variable being used. The author found that prices of tin and rubber were relatively stable in 1914, and hence uses that as the base year.

Private final consumption expenditure (PFCE) makes up the largest share of the total GDP. The author estimated PFCE 'on a per capita rather than on a per household basis because of the limited data on consumption at household level' (p. 55). To estimate the current price of PFCE, the author employs two approaches: direct and indirect. The latter is used when data are not available. Where data are available, the direct approach is employed to estimate expenses made on medical services, education fees, rail and ferry transport fees, utility bills and the sales of opium/*chandu*.

The author is resourceful in attaining data that are not directly available. For instance, he calculates the per capita expenditure on other consumption categories such as food, beverages and tobacco, clothing, rent, domestic servants, and others for the same set of consumption standards, which differed in accordance to occupation. For example, the author assumes that 'manual workers adhered to the lifestyle of Malay, Chinese or Indian manual workers', and that Malay, Chinese and Indian clerical workers followed the lifestyle of Asiatic clerical workers' (p. 60). Hence, their expenditure patterns are assumed to be different across all consumption categories.

Apart from population standards, the author also composes consumer price indices for the major categories of consumption and real wage index. The former is used to take into account price movements in each consumption category, while the latter allows the author to assess the changes of real income on consumption, observed through the wage movements among workers in agricultural and non-agricultural sectors. The income effects on consumption are also taken into account through the use of real wage index.

The second GDP component is the government final consumption expenditure (GFCE), which refers to 'the value of gross output of producers of government services, less the value of government sales and the value of any own-account capital formation' (p. 70). Computing Malaya's GFCE is more straightforward. Compensation of employees, or emoluments and intermediate consumption are taken into account and used for computing production and consumption of fixed capital, or depreciation. Due to the unavailability of data, assumptions have to be made for the third component—where there was about 4 per cent of total fixed capital consumption.

Gross fixed capital formation (GFCF), on the other hand, involves the expenditure of industries, the government services, and private services on fixed assets, excluding durable goods for military use. Based on the 1968 Systems of National Account, fixed assets are categorised into four main categories: construction; land improvement, and plantation and orchard development; machinery and equipment; and breeding stock. The author estimates GFCF by looking at expenditure on importing cement, machinery and equipment; cost of growing crops and the number of years needed to grow the crop, and so on. For GFCF at constant prices, the author uses a wage deflator in the form of 'minimum wage rate for rubber tappers in Singapore and the wage index for trades' 'to convert the GFCF in cultivated assets from current to constant prices' (p. 79).

The last component of GDP is the export and import of goods and services. Data are more readily available for this component, but in separate administration units: Federated Malay States, Unfederated Malay States, Penang and Malacca. Nevertheless, missing data were still a problem. Therefore, a number of caveats are taken into account in computing the historical data on exports and imports. For instance, imports of rubber and tin into Malaya for further processing before being exported are classified as a part of export of services rather than just export of goods.

Chapter 4 describes the trends of Malaya's GDP components in the long run and short run for the period of 1900–39, and compares them to economic performance in selected countries. On the whole, the author is of the opinion that 'Malaya's economic performance during these four decades was undoubtedly highly volatile' (p. 95), due to three cyclical shocks i.e. World War I (1914–18), the Roaring Twenties (1920–9) and the Great Depression (1929–32).

In the long run, final consumption and export were major contributors to Malaya's economy, with exports being increasingly important after 1905 due to strong global demand for tin and rubber. Consumption, on the other hand, is also found to have a strong and positive correlation with imports and investment, and the latter component may have had time-lag effect. Meanwhile, national savings began to grow strong from 1914–39 despite the detrimental effects of World War I and the Great Depression. This gave a positive indication to the future economy of Malaya.

For the short run, the author decomposes the growth of each GDP component in nominal and real prices. External trade consistently constitutes the largest proportion to Malaya's GDP growth rate compared to domestic demand. While the export of tin and rubber played a pivotal role in the export growth, other exports such as copra (dried meat of coconuts), sugar and coffee are seen to have substantially grown between 1915 and 1920, compared to the other periods in the first 40 years of the 20th century, as a result of low rubber prices.

The author compares and contrasts two important economic components: consumption and exports, across six countries. 'The share of private consumption expenditure in nominal GDP was by far the lowest in Malaya' (p. 121) in comparison with the US and UK, but 'the share of consumption in Malaya was closest to that of Japan' (p. 121). In terms of exports, Malaya's economy was positively related to the US economy, compared to the UK. Indonesia and Japan also experienced similar trade volatility as Malaya, where the effect of the Great Depression was immediately felt on their exports respectively, whereas the effect was more indirectly felt by Korea and Taiwan (via trade with Japan).

Chapter 5 compares the economic volatility of Malaya for the period 1900–39 with that of Malaysia for the period 1970–2009. The author employs the Hodrick-Prescott (HP) filter to obtain the trend GDP series, and to measure the intensity of economic volatility, and to compute the standard deviation of the cyclical component of GDP, which is the difference between the observed and the estimated values. It is found that the cyclical components were less prevalent in 1970–2019 than in 1900–39, indicating that the growth in the first four decades of the 20th century was more volatile.

The author thus concludes that 'macroeconomic volatility in post-independence Malaysia … has never matched the extent of the volatility experienced in pre-World War II Malaya' (p. 136). Specifically, 'investment was even more volatile than GDP' (p. 138) in pre-World War II, and the magnitude of investment was much lower than that of post-independence Malaysia, which hindered economic diversification in 1900–39.

Volatility of consumption was more pronounced in the first four decades of the 20th century than in the period between 1970 and 2009 (p. 144), due to two external events: World War I and the Great Depression, which largely affected the employment and income generation through the export of tin and rubber. This indicates that individuals might have delayed their spending or increased precautionary savings for future consumption during recession. Nevertheless, the magnitude of volatility in consumption is seen to have been lower than the volatility in GDP. Dawe's model is applied to measure the volatility in exports. Likewise, the author also concludes that export volatility had a negative impact on GDP growth during the colonial period compared to that in post-independence Malaysia.

In addition, the author succinctly examines the sources of economic growth for 1900–39, despite the lack of reliable data. Following the growth accounting method, he uses proxies to estimate the growth in capital and in labour, and total factor productivity (TFP). Growth of capital stock is drawn from the capital investment made during the pre-war period, while population data are used as proxy for growth in employment. TFP growth is simply the remainders of GDP growth after deducting growths in labour and capital.

In the last chapter, the author evaluates macroeconomic growth over the first forty years of the 20th century along with that of 1970–2009. In the first forty years of the 20th century, GDP growth was highly dependent on demand in the US and the UK, particularly for the two primary commodities of tin and rubber. Shifts in the prices of tin and rubber, along with fluctuations in the US and UK economies, would also have 'indirect ripple effects on other sectors of the economy' (p. 159), in the form of export earnings and government revenue.

Three key economic implications are drawn during the colonial period. First, the colonial government exercised a *laissez-faire* economic system, where Malaya's primary resources were highly exploited by British and European firms for profit maximisation. Consequently, Malaya had a higher GDP than its GNI due to the sizable remittance of income flowing overseas. Second, imbalances in socio-economic development within Peninsular Malaya were clearly visible. The British placed most of their economic interest on the west coast of the peninsula, where natural resources were abundant. Third, disparity in consumption was prevalent. While Malay, Chinese and Indian made up 97 per cent of the entire population in 1931, their expenditures were only a quarter of total consumption. By contrast, Europeans spent 'more than 21 times higher than the overall average' (p. 164) despite being merely one per cent of the entire population. This was likely due to 'upward pressure on wages' (p. 175), where foreign investors gained most of the yields.

In view of the decline in rubber estate acreage, the unemployment rate and the poverty situation worsened in the 1960s. Penang was particularly severely hit, the situation being badly aggravated by the loss of its free port status. To create employment and reduce poverty, the Penang government took a big step to diversify into industrial development, where Free Trade Zones were established to facilitate manufacturing activities for import substitution and exports. Multinational companies from the US and Japan chose to set up their manufacturing facilities in Penang Free Industrial Zone due to the availability of labour and government incentives. Most of them still maintain their operations there today, but in higher value-added and knowledge-based activities.

For a more complete picture, the author highlights the undesirable achievements made throughout the end of the 20th century. High reliance on foreign labour (following better education opportunities for the local population); imbalanced regional development; and unsustainable use of resources to support heavy industries by the Heavy Industries Corporation of Malaysia (HICOM) were obvious policy failures.

On the whole, this volume fills a gap in the literature. Its construction of a time series for Malaya's GDP from 1900–39 is the most commendable undertaking. This estimation highlights the importance of evaluating regional development across states in Malaysia. Future research can make use of the estimated GDP series to further estimate regional GDP or Gross Regional Product (GRP) across the three territories in the Malay Peninsula in 1900–39, and make comparisons with present growth rates across the states in Malaysia. Besides, think-tankers, policy analysts and social scientists will find this volume extremely useful in understanding the historical development of Malaya and in formulating policy suggestions that take into account the past trajectories of socio-economic development.

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