スルタン・ナズリン・シャー著

『経済を図示する』

――20 世紀初頭マラヤと現代マレーシアの比較――

Sultan Nazrin Shah, *Charting the Economy: Early 20th Century Malaya and Contemporary Malaysian Contrasts* (Oxford: Oxford University Press, 2017), 234 pp.

With a stylish cover depicting a seed of the pará rubber tree and granules of tin, *Charting the Economy: Early 20th Century Malaya and Contemporary Malaysian Contrasts*, written by Sultan Nazrin Shah, the sovereign of the State of Perak, Malaysia, and the current Acting King of Malaysia, offers a compelling explanation for the present-day prosperity of this country. Although historically Malaysian growth depended on two colonial products, rubber and tin, manufacturing now accounts for over a third of Gross Domestic Product (GDP) and agriculture for less than a tenth. The book, a revision of the Sultan's Harvard PhD thesis supervised by Dwight Perkins, is not a mere retelling of this export-led success story ―― it is amplified by long-term economic indicators which the Sultan and his team of researchers have constructed over the last two decades. While the book is to be welcomed for new GDP data for peninsular Malaya including Penang, it should also appeal to those more generally interested in the early twentieth-century history of Malaya.

Six chapters comprise the book: Chapters 1 and 6 provide introduction and conclusion, and the remaining four the main argument, starting with the historical background (Chapter 2), the construction of the historical GDP series (Chapter 3), followed by an analysis of the growth rates and volatility (Chapter 4), and finally a comparison with the more recent GDP series and a sources-of-growth analysis (Chapter 5). An overview of the book, and a foreword by Perkins, precede these main chapters. Appendices detail the data used to estimate GDP and its components.

Chapter 1 sets out the book's primary aim: to 'chart the course of Malaya's commodity-dependent economy during the first 40 years of the 20th century while it was under British colonial control'. The coverage of 'Malaya' includes the four Federated Malay States, the five Unfederated States, and the two towns (Penang and Malacca) of the British Colony of the Straits Settlements, but excludes Singapore, Sabah, Sarawak and Brunei. National income accounting charts the economy's fortunes. Precedents for this include various experiments since the early 1930s in Malaya, but for different sections and aggregates of Malaya's several geographical and administrative components. The challenge of this book was to integrate various colonial statistics with one another beyond the narrow administrative units to create internationally-recognisable country estimates.

After summarizing the beginning and the development of the British control in Chapter 2, and the important 1874 Pangkor Treaty, the author turns to an analysis of Malaya's two great export booms. By the 1870s, tin exports had already begun rapidly to increase and soon after the turn of the century rubber ushered in Malaya's (and one of the world's) greatest commodity boom. Both tin and rubber led to large influxes of migrant labour, Chinese for both tin and rubber and Indians for work on rubber estates. After embedding in Malayan history the story of the two great staple exports, the author moves on to the actual business of data construction in Chapter 3.

There are three approaches to estimate Gross Domestic Product: output, income and expenditure. The author takes the expenditure route, which is basically an arithmetical addition of household expenditures, government expenditures, fixed capital formation, exports minus imports. Much of the book's considerable effort is expended on collating the household expenditure series, as governments around the world only started routinely to conduct budget surveys after the World War II. Other statistics since the beginning of the colonial rule were more readily available in different forms.

While the author used 1957 budget data in his doctoral thesis to estimate household expenditure, he now employs estimates for living expenses and dietary standards variously found in 1930, 1933 and 1936 for different groups: Malay, Chinese, Indian, Eurasian and European; clerical and manual workers. He then extrapolates the expenditures on major categories of

items, such as food and clothing, according to the population size over time. To these bases is added the influence of price fluctuations and income fluctuations, adopted mainly from Singaporean sources, before aggregation into a single time series data. Also added to the final time series data are aggregate expenditures on opium and other government services, including railways, schools and hospitals. Opium was 'a very important source of government revenue'. While in his thesis the author pondered the large gap between the Chinese tin miners' wage series and the household expenditures (then simply proxied by food expenses) he now accounts for this partly with the added categories of expenses, and partly with price / income indices. The details of the methodology can be found in the 2010 book on Singapore GDP estimates by Sugimoto Ichiro, one of the Sultan's former research assistants.

Available statistics were carefully put together to create the government expenditure and capital formation series. The contributions of these to GDP were, however, small and found to be even smaller in 2017 book version of GDP estimates. Export as a fraction of GDP, which had been estimated as over 70 percent, is now also somewhat diminished. The reason for this is not apparent, but is possibly due to different methods used for separating Singapore's trade figures from those of the Straits Settlements. Export and import unit values were applied as deflators. Unlike Sugimoto Ichiro's Singapore study, which included food, clothing and other export prices, the export unit value index for Malaya appears to be based on just two items, tin and rubber, possibly with weights of 0.254 and 0.746, respectively applied to Singapore export prices. The book's import unit value index is based on the import data of the Federated Malay States, which include prices for various items and not just Burmese and Siamese rice, even though rice was Malaya's dominant import category. By the 1930s, Malaya produced less than a quarter of the rice it consumed; the rest, about 610,000 metric tons, came as imports. The post-World War I worldwide inflation caused a rapid escalation in rice prices, and the 1920 index import unit value of 298 (1914＝100) captures this effect. The book's overall consumer price index, particularly in regard to food and clothing, follows the Malayan import unit value index. Compared to the GDP estimates in the author's PhD thesis, the two peaks of 1920 and 1925 become more muted due to the use of these export and import deflators, making the updated GDP series rather uneventful except for the 1930's Depression.

As noted above, there are three approaches to GDP estimation. The Japanese during the 1942 to 1945 occupation tried to use the income approach. Takahashi Taizō, who was sent to Singapore as a member of a team from Hitotsubashi University (the former Tokyo University of Commerce), took note of a statistical table for 'money consumption' in Malaya. It was based on the occupational population statistics, for 10 administrative units, multiplied by the wage rates for the 8 occupational categories (*Proceedings of the Legislative Council of the Straits Settlements*, 1934). He realized that the total national income estimated by this very crude income approach closely approximated the total money circulation. His estimates of national income, derived in this way for 1934–39, in fact compare well with the aggregates of the Sultan's and Sugimoto's Singapore estimates for these years, with a difference of just 7 per cent.

In recent serious analysis, the output approach was preferred by Angus Maddison and his team who used the 'rough' GDP estimates pioneered by Pierre van der Eng for Malaya. Van der Eng's estimates are based on 1970 value added for 17 different industry categories which were retropolated with physical output. This methodology takes no account of price changes, and the series is less volatile than the Sultan's, which, by taking out the 1920 import and 1925 export price fluctuations produced negative swings. While the Sultan's estimates might be regarded as more realistic, as against this the swing for 1929 turned out to be much larger, possibly affected by a continuous drop in rubber prices after the 1925 peak. While van der Eng's estimates were based on 1970 value added patterns, the Sultan's and Sugimoto's methodology rely on an extrapolation of consumer expenditure patterns for just one year for each representative ethnic-occupational group. Their consumption basket is not updated throughout the period, and the possible changes in income elasticity over time are not taken into account (except for opium consumption which appears to be highly income elastic although

possibly also partly reflecting Chinese immigrant inflows and outflows with the changed fortunes of tin and rubber exports). Yamada Isamu, another Hitotsubashi academic during the occupation, conducted a household expenditure survey in 1943 for Singapore, Ipoh and Kuala Lumpur, for Malay, Chinese and Indian households. The consumption basket derived from this survey may provide useful insight into changes in income elasticity, particularly for food items. A further comprehensive comparison of GDP estimates and a thorough reflection on the occupation period and national income accounting methodologies would constitute a worthy task for future researchers and add substantially to our knowledge of the Malaysian economy.

Chapter 4 further provides the author's own analytical explanations for the data constructed. He points to the marked low level of household consumption in GDP, which 'mainly reflected the rising proportion of corporate profits remitted overseas'. It is indeed the rising proportion of net exports to GDP that is striking, and its effect is confirmed by the decomposition analysis of growth rates. Particularly prominent is the 1925 peak in the value of rubber exports, which the author attributes to the recovery of the automobile industry in the US from 1925 boosting demand and causing prices to spike. The import unit value index mentioned above controls for this effect. The 1929 figure then stands out as the real peak. Volatility was severe, and the author stresses that 'the magnitude of the downturn in Malaya's economy during the Great Depression was even larger than that of the US'. In 1929, export volume of rubber was 116 percent greater than in 1925 but its total value 40 percent less, a fall in rubber prices well before the 1930s depression. For the year 1932 rubber prices fell to as little as 6 per cent of those in 1925.

The author's recognition of the risk of exposure to such high commodity price volatility, leads him to draw attention to lower volatility present in the 1970–2009 GDP estimates in Chapter 5 and suggest that lower volatility would have enhanced pre-World War II growth rates. The author further investigates the sources of growth, be it labour or capital or productivity, using growth accounting methodology. Total factor productivity (TFP) is calculated to account for 2 percent of the total of 5.5 percent real GDP growth between 1900–1939. In his thesis, the author calculated the TFP contribution for 1975–1997 as 1.9 percent (out of total 7 percent growth). At that time, he attributed 1.3 percent within TFP to investment in better education, based on the data of the educational composition of the workforce. In the current version of his analysis, the author refrains from commenting on the recent figures, and instead sees Malaysia as still awaiting a transformation from being an input-driven economy to one with technological change as the dominant growth source. Chapter 6 concludes and calls for 'a systematic collation of information on the nature and amounts of profits, rent and other funds repatriated by the colonial government and the private agency houses to the UK during the colonial period'.

What does not show up in the statistics may sometimes have great importance. The author acknowledges that 'while much of this book focuses on measures of GDP and material well-being, it is recognised that a broader range of indicators is necessary'. For example, the possible use of the occupational population statistics, as the Japanese wartime researchers did, would have provided information on unemployment and underemployment. These must at times have been considerable, and consideration of this issue would have amplified the implications of plunging income effects during the Great Depression. What happened to the laid off Chinese, Indian and Malay workers? Many, but by no means all, migrant workers were repatriated. Travelling around the former tin mining areas in Malaysia, one finds flourishing mountain villages with pineapple cultivation, and port villages bustling with fishery and waterfront tourism. The resilience of this country surely lay at least partly in its huge natural wealth, low population densities and social and ethnic diversity. Malaya appears to have, in considerable measure, the possibility of food self-sustenance to fall back on —— a perhaps biased view, though, only held by the former wartime Japanese economists.

[**Shinobu Majima**]