Comparing Colonial and Post-colonial Government Finance Behaviour in Singapore: Revenue-raising, Expenditure Allocation and Budget Management

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The objective of this paper is to examine the long-term pattern of government finance behavior in Singapore. Attention was given to see whether Singapore have experienced a significant shift in the process of transition from British colonial period to post-colonial period.

The structure of this paper is arranged as follows. **Section 2** outlines the literature review on the characteristics of colonial government finance behavior. **Section 3** provides the historical transition of government finance behavior in Singapore in terms of revenue raising, expenditure allocation and government budget surplus/deficit management. Special attention was given to clarify the notable similarities or differences between the colonial and post-colonial period. Finally, **Section 4** provides some concluding remarks.

2. Literature Review on Features of Colonial Government Finance Behavior

2.1. Small Size of Government

Historically, changes in government expenditure levels were largely fashioned by the changes in attitudes towards the role of the state in the economy. The study by Tanzi and Schuknecht (2000) elaborate the major transitions of government's involvement in the economy in industrialized countries during the twentieth century and found that growth in government expenditure has been a general phenomenon despite the considerable institutional differences. Tanzi and Schuknecht (2000) pointed out that the role of the state in the economy has experienced four major transitions in the twentieth century, namely (1) the period up to World War I, (2) the interwar period, (3) the period until 1980 and (4) the period after 1980.

Initially, the *laissez-faire* attitude occupied a position of predominance while the role of government in economic life was minimal. In fact, the onset of the World War I brought about considerable increases of government expenditure in the form of war expenses. Subsequently, the Great Depressions in late 1920s and early 1930s experienced world-wide was regarded as a monumental failure of the market economy and this had led to the expansion of government involvement in the nation's economy. The most notable expansion of government involvement in the economy was recorded for the years 1960 and 1980. As is presented in Table 1, the percentage share of real general government expenditure to real GDP for selected years generally showed rapid growth for the period 1960-80 and remained relatively stable. In 1980s, skepticism about the proper role of state in allocation of resources, stabilization and income distribution emerged (Buchanan, 1975, Premchand, 1983). Some critics also started to question the practical implementation of these policies. As deficits and public debt rose, many economists argued that government had grown much beyond its justified role, undermining economic incentives, property rights and economic freedom.

The 1990s have seen much interest in budgetary institutions and in fiscal rules to prioritize and improve the efficiency of public spending and to make government **live within its means**. Many countries, and especially the industrial countries, have introduced important reforms that have helped to make fiscal policy sounder. Government began to focus on public spending on essential tasks and provide basic services in the most cost-effective ways. Unlike the previous period, these approaches are in fact aimed at reducing the size of public spending. Nevertheless, as presented in

Table 1, few countries managed to reduce the government expenditure share to GDP. This implies that reduction of government expenditure is not an easy task as compared with its expansion.

Table 1
Percentage Share of Real General Government Expenditure to Real GDP for Selected Years, 1870-1996 (1990 prices)

	Late 19th Century about 1870	Pre World War I 1913	Post World War I 1920	Pre World War II 1937	Post World War II 1960	1980	1990	1996
Australia	18.3	16.5	19.3	14.8	21.2	34.1	34.9	35.9
Austria	10.5	17.0	14.7	20.6	35.7	48.1	38.6	51.6
Canada	-	-	16.7	25.0	28.6	38.8	46.0	44.7
France	12.6	17.0	27.6	29.0	34.6	46.1	49.8	55.0
Germany	10.0	14.8	25.0	34.1	32.4	47.9	45.1	49.1
Italy	13.7	17.1	30.1	31.1	30.1	42.1	53.4	52.7
Japan	8.8	8.3	14.8	25.4	17.5	32.0	31.3	35.9
New Zealand	-	-	24.6	25.3	26.9	38.1	41.3	34.7
Norway	5.9	9.3	16.0	11.8	29.9	43.8	54.9	49.2
Sweden	5.7	10.4	10.9	16.5	31.0	60.1	59.1	64.2
Switzerland	16.5	14.0	17.0	24.1	17.2	32.8	33.5	39.4
United Kingdom	9.4	12.7	26.2	30.0	32.2	43.0	39.9	43.0
United States	7.3	7.5	12.1	19.7	27.0	31.4	32.8	32.4
Average	10.8	13.1	19.6	23.8	28.0	41.9	43.0	45.0
Singapore		22.7	22.2	18.8	10.7	25.2	19.2	21.8

Sources: Tanzi and Schuknecht (2000: 6-7) and Sugimoto (2009).

Unlike statements of Tanzi and Schuknecht (2000), the share of real general government expenditure to real GDP in Singapore remained small and stable over time as compared with industrialized countries as is presented in Table 1. Historically, one major difference between Singapore and other industrialized countries was the fact that Singapore was formerly governed by the British colonial authority. In fact, the foundation of revenue raising, expenditure allocation and budget management were established and implemented by the colonial authority. The small share of government expenditure to GDP should also be treated as one of the features of the colonial government's fiscal behavior in Singapore. While the characteristic of the small share of government expenditure to GDP continued during the period of self-government, the underlying principle of government fiscal behavior underwent a substantial change. During the period of self-government the budgetary process and actual implementation of government fiscal behavior was determined in line with its owns needs as opposed to the interest of the colonial government which paid more attentions to the benefits of home country (Britain). One may be interested to know whether there are any common features in the government fiscal behavior during the two periods, that is the British colonial period and the period of self-government.

In the following sections, this study would like to highlight the two key terms which explain the features of colonial government fiscal behavior, namely “creation of a balanced budget structure (2.2)” and “weakness of colonial government macroeconomic management (2.3)”.

2.2.Creation of a Balanced Budget Structure

One of the characteristics of fiscal principle of the colony was to self-support and have a balanced budget, i.e. “living within means”, such that there was no need for the exchequer of the home country to subsidize the Colony (Tan, Shu-hung, 1997). There are many criteria in assessing whether the budgetary performance achieved the objectives of this fiscal philosophy. The most important one is the actual surplus/deficit of the financial budgets.

Huff (2003b) has compiled the balance of government finance in Burma, Indochina, Thailand, British Malaya, Indonesia and Philippines and elaborated that the colonial authorities of Southeast Asian countries generally favored balanced budgets. Although external shocks sometimes precluded budget balance, it however remained sufficiently near zero.

In the case of Hong Kong, for example, the philosophy and management of fiscal system was governed by the financial procedures stipulated in the colonial regulations. These financial procedures controlled the scope and scale of public expenditure and the financial reporting system of the Colony (Tan, Shu-hung, 1997).

Sugimoto (1997 and 2007a) examined the British colonial financial administration in the state of Johore for the period 1910-40. This study established that during the thirty-year period of British colonial administration, the central concern was the creation and accumulation of budget surpluses and its allocation to government portfolio financial investments in the British Empire. For the period 1914-40, total accumulated government financial assets had increased from $2 million to $41 million and almost the entire assets were allocated for portfolio government financial investment. It was almost double the total annual government expenditure.

As a matter of fact, this government finance structure was strongly linked with the financial situation of the government of the United Kingdom. It will be noted that the United Kingdom faced serious government debt after World War I which in part could be attributed to the expansion of government expenditure and also due to the problems arising from budget management.

For the year 1913, percentage of gross public debt to GDP in UK was at 30.4%. However, the share to GDP dramatically increased to 132% and 188.1% in 1920 and 1937 respectively (Tanzi and Schuknecht, 2000:65).

It does not mean that all colonies could afford to maintain the “living within means” fiscal principle. In fact, many colonies faced serious government finance deficit as a result of a weak revenue base compounded with the demand for extraordinary expenditure such as defense (Da Costa, 2007). For example, British India borrowed quite heavily to finance its expenditure, both in the London money market and also in India. These borrowings peaked at the time of the World Wars (Roy, 2000:229). Nevertheless, the colonial government authority always aimed to maintain a balanced budget. In line with this, colonial countries by nature needed to conduct prudent government finance management. How did they realize such financial management? In fact, it was strongly related to the budgetary process. In any country, there are at least two stages before the actual implementation of government finance administration. First comes the formulation phase which involves making advance estimates of revenue and expenditure. This is entirely the responsibility of the executive arm of the government. The second stage involves seeking legislative approval to the executive's proposals. In most cases, parliament has been entrusted with matters relating to taxation vis-à-vis tax decisions and spending policies. This being the case, the crucial causal force for determining the budget was the voter under democratic parliamentary systems which stimulated citizens-participation in their choice of government. The budgetary process during the colonial period, however, differed from that practiced during the period of self-government. In practice, the colonial budget was institutionalized to meet the needs and interests of the suzerain power. For example, the budgetary system of the Colony of Straits Settlements was formulated by the Treasury of the Colony of Straits Settlements at the first stage phase. Subsequently, authorization of the budget was discussed by the legislative council members and executive council members who were appointed by the Governor (See Figure 1).

Figure 1
Members of Legislative Council and Executive Council

Members of Legislative Council	Members of Executive Council
Governor as President Ex-officio members (11) Official members (2) Elected Unofficial members (2 since 1924) 11 Nominated Unofficial members (11) (Nominated Unofficial Members are subject to the confirmation or disallowance of His Majesty the King)	Governor as President General officer Commanding the Troops, Malaya (1) The Colonial Secretary, Penang, Malacca (2) Resident Councilor, Penang, Malacca (2) Attorney-General (1) Treasurer (1) Official member (2) Unofficial member (3)

( ) number of people.
Sources: Malayan Year Book 1939 and Mills, Lennox A (1942).

The legal power of the governor, the advisory role of the two councils, and the ultimate control of the colonial office in London was essentially the set-up applied for the colonies. On the other hand, the colonial authority did not permit resident participation in the formulation of the budget. Generally, raising revenue is politically sensitive but spending money is favorable for everyone.[1]

2.3. Weakness of Colonial Government Macroeconomic Management

It is crucial to examine whether the colonial government planned and implemented effectively the macroeconomic management of the economy. As described previously, the emergence of the role of government became clearer with the onset of the Great Depression in the end of 1920s. In the case of western industrialized countries, as mentioned above, the government's role in macroeconomic management became active during the Great Depressions. It was market failure that clearly justified government intervention. For example, United States introduced major public expenditure programs with the New Deal, and other governments authorized higher spending on the unemployed and on public works partly to create employment. As a matter of fact, the depression was transmitted from the advanced industrial economies to Southeast Asia through a sharp fall in demand for many of the region's major primary commodities such as rubber and tin which were exported to western countries. Singapore was one of the few economies which underwent a macroeconomic shock more severe than that experienced by other countries (Huff, 2001:293).

In this regards, it is significant to see whether the colonial government authority had effectively implemented macroeconomic management. In order to fulfill the four major objectives of macroeconomic management, namely (i) full employment, (ii) low inflation, (iii) a high, but sustainable rate of economic growth and (iv) keeping the balance of payments in equilibrium, there are two instruments of macroeconomic policy, namely fiscal policy and monetary policy. Fiscal policy comprises government spending

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[1] Nevertheless, constitutional theory and actual practice was incongruent. In reality, the Governor was a limited monarch (Mills 1942). His policy was influenced by local public opinion and the press, and one of his most cherished ambitions was that he shall not provide ammunition for any questions in the House of Commons in Britain. In other words, the Governor has to plan and implement the budget to meet the request of the colonial office in UK by observing response from the local populace. After World War II, the situation changed slightly. The first election for the Legislative Council was held in 1948. The Legislative Council comprised nine elected unofficial members, four nominated unofficial members, five nominated officials and four ex-officials. Nevertheless, the electorate numbered only 22,000 since voting was confined to only registered voters and registration was voluntary and not mandatory. It was a far cry from the budgetary system established in western countries. After the formation of self-government, authorization of budget changed due to the creation of a democratic parliamentary system. Regular parliamentary elections chose the political party and led to increasing power and say of the citizens.

and taxation and is frequently used for counter-cyclical adjustment, aiming to automatically stabilize demand by increasing government expenditure. On the other hand, monetary policy is the process by which the government, central bank or monetary authority manages the supply of money or by trading in the foreign exchange market. Generally monetary policy can be referred to as either being an expansionary policy or a contractionary policy. Expansionary policy is traditionally used to combat unemployment in a recession by lowering interest rates while contractionary policy has the goal of raising interest rates to combat inflation.

To my best knowledge, there is no literature which systematically analyses the effect of colonial government macroeconomic management behavior on the nation's economy. It is partially because of the deficiencies of historical economic indicators. Nevertheless, there are some previous literatures explaining the government involvement in the nation's economy during the Great Depression period.

Huff (2001) conducted a study on the impact of the Great Depressions to the colonial economy, particularly highlighting the issue of massive increases of unemployed labour during the period and elaborated on the implications of colonial government macroeconomic management behavior in British Malaya. He stressed that the British colonial authority had no intention of undertaking 'purely relief works' to provide employment during the Great Depression. In fact, little new public works expenditure materialized: in 1931 two-thirds of the planned Straits Settlements expenditure of $15.2 million on extraordinary public works was to meet existing commitments. Instead of creating new job opportunities, the British colonial authority resorted to repatriation to regulate the size of the workforce (Kratoska, 2000 and Huff, 2001).

Booth, Anne (2002) also pointed out that most Southeast Asian colonies ran considerable budget deficits in the early 1930s. This hardly reflected a conversion to Keynesian economics on the part of colonial officials, but rather an inability to reduce expenditures in the face of rapidly falling revenues.

In terms of monetary policy, the colonial currency board system can be viewed as minimal government involvement. Because colonial currency boards offer no scope for government regulation or intervention, they are the antithesis of a central bank (Huff, 2003a:127, Roy, 2000: 233). In other words, colonial monetary policy was particularly inadequate in the task of stabilization of prices and outputs (Roy, 2000:237). Before World War II, money supply in the Colony of Straits Settlements consisted chiefly of base money, M0, issued by currency boards. During the period base money supply changed principally in response to changes in the current account of the balance of payments.

The fact that exchange rate policies were formulated largely in the interests of the metropolitan powers in the early decades of the twentieth century is hardly surprising (Booth, Anne, 1990). Exchange rate policies were used to promote tight economic links between the colonies and the metropolitan power, and especially to encourage the importation of industrial products from the sovereign's economy.

2.4. Summary

Based on the literature review, it might be possible to summarize the main features of the colonial government financial behavior as follows. Firstly, the major objective of the colonial government was the establishment of a self-sufficient budget structure so as not to depend on the home country. To ensure this principle was met budgetary process was handled by the people who represented the interests of the home country. Secondly, the colonial government did not implement as effectively macroeconomic management as was done in western countries. The colonial government only passively reacted against the unforeseen economic changes taking place.

3. Historical Transitions of Government Finance Behavior of Singapore in the Twentieth Century

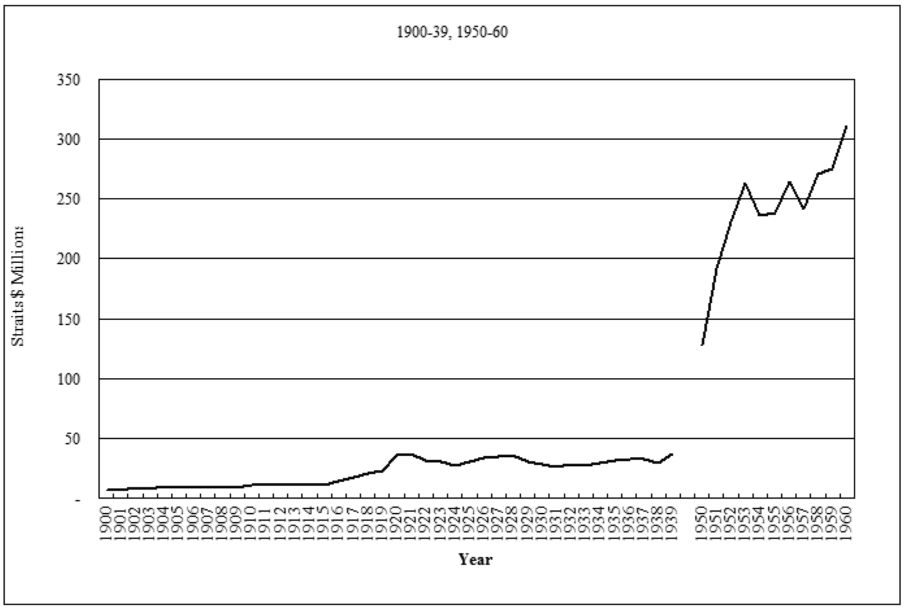
This section briefly observes the long-term structural changes of revenue raising, expenditure allocation and budget management of Singapore during the British colonial and post-colonial period.

3.1. Government Revenue

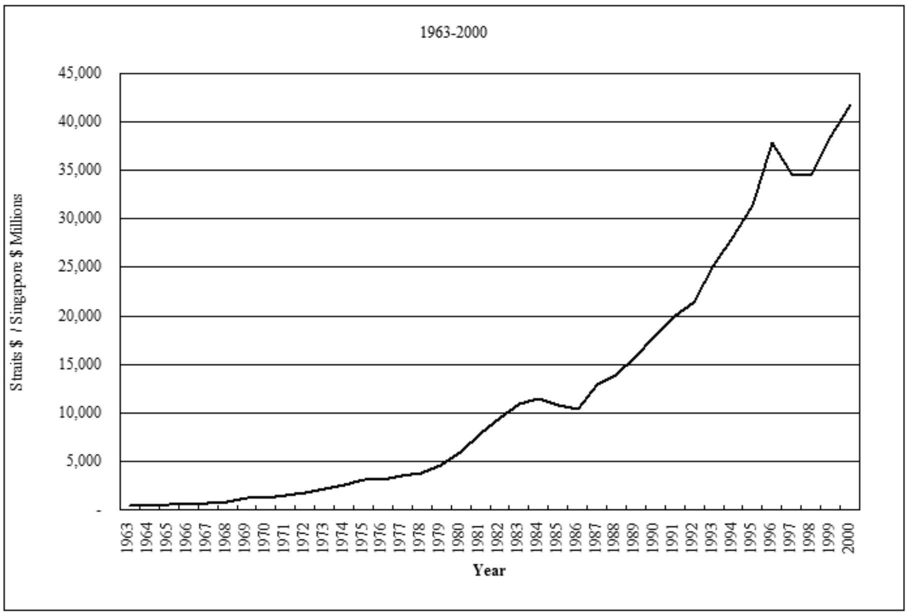
3.1.1. Growth of Government Revenue

Figure 2 provides a chart on Singapore's general government revenue at current prices for the twentieth century.[2] Prior to World War II, government revenue experienced fluctuations over time. The most rapid revenue growth of 53% was recorded in 1920. It was due to the introduction of Income tax as a temporary measure to compensate for the deficiencies of revenue raising capacity. After the termination of this implementation in 1922, total revenue collection fell by 16% despite revenue being raised from other sources having improved.

Figure 2
Singapore: General Government Revenue at Current Prices, 1900-39 and 1950-2000



[2] Revenue is composed of heterogeneous elements. Accordingly, the elements are classified according to different characteristics depending on the type of revenue, namely, (1) taxes and (2) social contribution (3) grants and (4) other revenue. (IMF, 2001:47). In this study, Government revenue refers to revenue collected from Colony of Singapore, Municipality of Singapore/ City Council of Singapore for the period 1900-39 and 1950-60. Revenue from Trading Department was not included in this definition. After 1960, revenue credited to the Consolidated Revenue Account was utilized.



Source:
1900-39, 1950-60: Constructed by Author.
1960-81: Department of Statistics, Singapore (1983).
1982: Estimated by Author.
1983-2000: Asia Development Bank (2001 and 2005).

Another reduction of revenue was observed in 1929. It was solely due to the reduction of revenue collection from the sales of opium.

Clear distinctions of the size of revenue was, in fact, observed between the pre-war and the post-war periods. It is partially due to inflation but mainly because of the implementation of income tax in 1947. After the formation of self-government, revenue earning has experienced a steep increase over time. However, a notable reduction of revenue was recorded during the recession period, namely 1985-1986 and 1997-1998.

3.1.2. Changes in Revenue Structure

According to the study by Tanzi and Schuknecht (2000) on revenue structure, the revenue composition in Western industrialized countries experienced considerable changes over the century. Initially, indirect taxes were the most crucial revenue source. Nevertheless, narrow tax bases prevented the revenue raising capacity. After World War II, income tax and social security contributions have become the most crucial revenue categories, comprising almost two-thirds of total government revenue. By 1960, this ratio between direct and indirect tax revenue still prevailed. Additionally, social security contributions started to be become an important revenue source. For the period 1960-2000, revenue increases were largely derived from direct taxes and social security contributions. In most of the western countries, personal income taxes came to be seen as the best and fairest taxes. Personal income taxes were ideal instruments because they could be progressive and thus contribute to the objective of income redistribution. These direct taxes are more in conformity with the ability-to-pay principle and are more befitting of a modern community, because they are generally levied at progressive rates (Goode, 1984:89).

Unlike industrialized countries, the revenue structure of developing countries depends upon customs (export and import duties) and excise duties, poll tax, commodity taxes and other indirect taxes for its sources of revenue. These indirect taxes are regressive in nature and the tax burden falls heavily and unevenly on the poor (Goode, Richard, 1984). A developed country relies more on income tax, profit tax, property tax, estate duties, inheritance tax, and other direct taxes for its revenue.

3.1.3. British Colonial Period (1900-39 and 1950-59)

The British colonial government in Singapore formed three levels of government bodies, namely the Colony of Singapore, Municipality / City Council and Rural Board. As presented in Table 5, the Colony of Singapore accounts for between 72.1-90.0% of total revenue while Municipality / City Council and Rural Board contributed about 8.5-27.9% and 0.8-2.0% respectively.

With elected self-government for all internal matters under the 1959 Constitution, the ruling People's Action Party abolished the City Council and the Rural Board on the ground that Singapore was too small to afford such differentiation in roles (Lee Soo Ann, 1974:68-69).

The British colonial authority needed to identify potential revenue sources for

Singapore which became part of its colonies in the early 19th century. Unlike other British colonial territories which relied on export duties, Singapore as a free port relied heavily on trade for its economic activities. Under these circumstances, the British colonial authority could not impose any export duties as their revenue source. Alternatively, the colonial authority needed to rely on the revenue collection from the sales of opium / chandu (Trocki, Carl, 1990, Emerson, Rupert, 1969 and Lim Chong Yah, 1967). As can be seen from Table 2, more than half of the entire revenue came from this single revenue source during the 1900-20's. Nevertheless, its reliance on opium sales as a revenue source reduced gradually over the period. The revenue from opium was paid into the "Opium Revenue Replacement Fund" for each year and the money invested in securities abroad. More importantly, the British colonial authority ceased to depend on opium revenue by abolishing the opium sales immediately after the end of World War II.

Import duties increasing became an important revenue source over time. Import duties that were imposed were that on petrol (1909) followed by tobacco (1916), which became a crucial duty item. By the 1930s, the revenue derived from import duties already exceeded that derived from the sales of opium. This expansion was achieved through the increases of rate of duty.[3] In order to overcome this serious weak foundation of revenue sources, the British colonial administration introduced income tax during the 1920-1923. As no similar tax was imposed in the Federated Malay States and Unfederated Malay States, commercial interests in the Straits Settlements argued against the discriminatory treatment. The law was finally repealed (Lee Soo Ann, 1974:81).

[3] For instance, duty of petroleum with a flash point of 73° Fahrenheit was 5 cents per gallon when it was first imposed in 1909, and this was increased to 10 cents in 1925 and raised further to 35 cents per gallon in 1931. The duty of Tobacco was 60 cents per pound before 9 August 1921, raised to 80 cents after that date, raised further to $1.00 per pound in 1925 and raised further still to $1.10 in 1932 (Lim Chong Yah, 1967: 256).

Table 2
Singapore: Revenue by Major Sources at the level of Colony of Singapore, Municipality / City Council of Singapore and Rural Board at Current Prices, 1900-39 (Percentage)

Percentage of Total by Level

	1907	1915	1920	1928	1933	1938	1952	1956
Colony of Singapore	72.1	77.8	84.4	72.9	74.7	72.7	90.0	85.9
Municipality / City Council of Singapore	27.9	20.5	14.8	26.0	23.9	25.3	8.5	12.4
Rural Board		1.7	0.8	1.1	1.4	2.0	1.5	1.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Percentage Composition of Revenue at Each Level

	1907	1915	1920	1928	1933	1938	1952	1956
Colony of Singapore								
Sales of Opium [2]	49.2	61.3	44.4	35.1	20.4	18.3		
Sales of Liquor	12.1	10.8	6.9	10.6	8.1	10.9	6.7	9.2
Import Duty	12.1	10.8	10.7	21.8	21.8	26.6	26.5	26.4
Stamp Duty	4.7	5.5	5.6	8.7	5.7	13.6	0.8	0.9
Income Tax			14.2				34.6	29.6
Interest on Investment and Loan[3]	0.0	2.1	1.3	3.9	16.8	14.2	1.8	1.8
Others[1]	21.9	9.5	16.8	19.8	27.2	16.4	29.6	32.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Municipality / City Council of Singapore								
Rates	47.9	62.7	55.2	61.9	55.3	52.9	61.5	71.1
Taxes	7.9	9.0	23.1	9.7	8.8	11.6	1.9	1.2
Licences	1.4	2.7	0.7	0.5	4.3	3.0	6.7	5.2
Fees	3.1	3.7	4.5	8.7	12.7	12.0	23.0	16.2
Miscellaneous	3.7	7.8	4.7	10.9	8.7	11.0	2.3	1.5
Reimbursements	4.3	1.6	3.8	3.1	5.0	4.1	0.0	0.0
Rents	31.7	12.4	8.0	5.3	5.1	5.3	4.5	4.9
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Rural Board [4]								
Revenue Proper		35.4	77.0	87.7	69.0	58.6	NA	NA
Government Contribution		64.6	23.0	12.3	31.0	41.4	NA	NA
Total		100.0	100.0	100.0	100.0	100.0	100.0	100.0

Sources:
Blue Book, Straits Settlements, various series, Financial Statement of Colony of Singapore, various series, Annual, Administration Report of the Singapore Municipality, various series, Annual Administration Report of the City Council of Singapore, Various series.

Notes:
(1) Others in the Colony of Singapore include Fees of Courts, Rents of Government Property, Land Sales, Postage Stamps and Others, Overpayments recovered, Motor Cars and Drivers' Licenses etc.
(2) Net revenue earning from the sales of Opium was available for Straits Settlements as a whole for the period 1911-1930. The distribution for Singapore for that period was derived based on the average distribution for the period 1931-39.
(3) Interest obtained from the Opium Revenue Replacement Fund for the period 1933-39 was also presented for Straits Settlements as a whole. The distribution for Singapore was calculated based on the size of revenue earning from the sales of opium for the relevant years.
(4) Rural Board was established in 1908.

It is important to note that interest from government financial investment such as Opium Revenue Replacement Fund, Sterling Security Fund and other loans had brought considerable stable revenue for the Colony of Singapore.

After World War II, money collected in the way of import duties represented the most important revenue source coinciding with the abolishment of revenue collection from the sales of opium. Nevertheless, the government could not expect any further increase in the size of revenue. Under such circumstances, the income tax bill was finally introduced in 1947. "The Income Tax Ordinance of Singapore" was modeled after that of the United Kingdom. Comparatively speaking, the Government imposed a relatively moderate progressive tax rate in Singapore (Edwards, 1970).

As Singapore was a free-enterprise and open economy, too progressive a rate would hinder people's incentive to work, save and invest. The company income tax was applied to limited companies, public and private, but not to unincorporated firms such as sole proprietors and partnerships because the profit of the latter is accrued to the proprietors or partners and the personal income tax is applied to them accordingly. The company income tax was at the flat rate of 40% on 'taxable profit'. The revenue structure, in fact, has changed rapidly within a relatively short historical time frame.

In the case of the Municipality, increasing urbanization of Singapore led to increases in revenue through the rates it levied on property and the services an urban centre needed. The construction of respective revenue sources remains relatively stable over time. The Rural Board which existed under the Municipal ordinance, with powers similar to the Municipality / City Council similarly derived its revenue from the levying of rates.

3.1.4. Post-colonial Period (1959-2000)

After the formation of self-government, income tax comprising company and individual taxes remains the most crucial revenue sources for Singapore as presented in Table 3. The size of revenue from income tax accounted for more or less half of the total taxes by 1975. In line with the expansion of income taxes, revenue from selling, leasing and renting of government assets such as land, facilities and motor-vehicle related taxes also showed increases. On the other hand, the percentage contribution of revenue from custom and excise duties had gradually decreased.

Table 3
Singapore: Revenue by Major Sources at Current Prices, 1960-2000
(Percentage)

	1960	1965	1970	1975	1980	1985	1990	1995	2000
Income Tax	24.4	20.7	20.8	36.0	33.2	28.1	37.5	35.4	43.2
Import Duty and Excise	33.1	29.8	23.6	12.9	11.7	9.2	10.0	6.4	5.7
Property Tax	3.2	12.2	9.0	9.8	9.7	11.1	8.5	6.6	4.8
Motor Vehicle Taxes	2.3	5.5	4.9	4.8	8.5	6.4	10.2	7.3	7.0
Stamp Duty	1.3	1.2	1.9	1.5	2.8	2.9	5.0	5.5	4.4
Goods and Services Tax								6.6	7.2
Others	8.0	6.9	10.6	5.1	5.5	5.6	9.3	10.3	9.0
Non-tax Revenue	27.7	23.7	29.2	29.9	28.6	36.6	19.6	21.8	18.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Sources:
1951 and 1956: Financial Statements of Colony of Singapore and Lee Soo Ann (1974:83).
1960-1995: Low, Linda (1998:111).
2000: Year Book of Statistics, Singapore, Various Series.
Notes:
(1) Others include Tax on betting, estate duty, other transfer receipt and other non-transfer receipt.
(2) Non-tax revenue includes Sales of Goods & Services from Current Operations, Reimbursements for Services & Sales of Lands and Interest & Dividends Received.

In 1985, the Government of Singapore set up an Economic Committee to identify new directions for its future economic prosperity. The committee report submitted in 1986 suggested new tax system. Firstly, suggestion was made to reduce corporate and personal income taxes from 40% to 30% and subsequently 25%. It was mainly due to the fact that Singapore government would like to attract foreign investment and foreign talents. Additionally income tax also has a detrimental effort on savings and enterprise. In response to this suggestion, the highest scale of company income tax rate and individual tax rate has been brought down to 33%. Additionally, reduction of property tax to 16% was implemented in 1990.

Secondly, the committee recommended structural tax system from direct to indirect taxes as the main source of revenue. This is because the reduction in income tax revenue has to be compensated by an increase in other revenue. Option is laid on the introduction of indirect taxation on goods and services (GST). Needless to say, GST is inherently regressive in nature since everybody pays the same tax rate regardless of the income level. However, it was rationalized on the ground that broad based goods and service tax would not create disincentive to corporations (regarding profitability) and individuals (with regards to saving). Finally, on 1st April 1994, the government introduced the GST (Lim Chong Yah, 2004:257).

Other than tax revenue, it must be highlight that the proportion of non-tax revenue is relatively high in Singapore as compared with other countries. A few key items account for the difference between Singapore and other countries. Firstly, revenue from the lease of land is substantial, at about 7 per cent of GDP, since the government owns more than 80 per cent of the land in Singapore. Secondly, prudent investment of the large accumulated stock of government assets has provided a substantial income stream to the government, estimated at about 5 per cent of GDP (Ghesquiere, 2007:57).

In short, the government's finance structure underwent a substantial transformation; from relying on traditional revenue sources such as revenue from the sale of opium during the colonial period to more diversified and modern revenue sources during the period of self-government. Most notable among the changes was the shifting of the tax burden from unevenly on the low-income group to all income group levels based on the ability-to-pay principle which is more befitting of a modern community, because they are generally levied at progressive rates. However, it is important to note the consistency of both the colonial government and self-government in constantly paying attention to create a revenue system which provided incentives to foreign investors.

3.2 Government Expenditure

3.2.1. Growth of Government Expenditure

In the twentieth century, Singapore has experienced a long-term real GDP growth rate (1990 prices) of 4.5% and 7.2% for the period 1900-39 and 1950-2000 respectively. In real per-capita terms, a moderate growth rate of 1.5% was recorded for the period 1900-39. On the other hand, a higher growth rate of 4.6% has been attained for the period 1950-2000. Hence, there are inter-temporal differences in terms of real growth rate between these two distinct periods. As is presented in Table 4, the most remarkable growth in terms of real GDP and per-capita real GDP was recorded during 1921-30 in the pre-World War II period and 1960-80 in the post-war period. A similar phenomenon was observed in terms of real total government expenditure, government final consumption expenditure and government fixed capital formation. It will not escape notice that Government Fixed Capital Formation (GFCF) showed the highest average growth during the period 1910-30. The average growth was even higher than that in the post-independence period. It was mainly because of the government's efforts to undertake major infrastructure projects in order to ensure it maintained its eminent position as the regional trading centre.

In terms of share of real government expenditure to GDP, government final consumption expenditure (GFCE) generally remained stable for the entire century exclusive of the 1960s. On the other hand, the share of government fixed capital formation (GFCF) to GDP showed a gradual expansion from 1921 onwards reaching its peak (11.6%) during the 1981-90 periods after which it declined to 7.6 % during the next decade. In terms of size of real government expenditure to GDP, real total government expenditure of Singapore for the years 1900-39 and 1950-2000 was 17.0% and 18.0% respectively; this being remarkably low compared with other industrialized nations**.** Both GFCE and GFCF also have experienced gradual increases of their shares of GDP until 1990, after which a slight reduction was experienced.

Table 4
Singapore: Trend of Government Expenditures (period annual averages), 1900-2000 (1990 Prices)

	Average % growth								Share of TGE to GDP (%)	Share of GFCE to GDP (%)	Share of GFCF to GDP (%)
	Real GDP	Per-capita Real GDP	Real TGE	Per-capita Real TGE	Real GFCE	Per-capita Real GFCE	Real GFCF	Per-capita Real GFCF			
1900-1910	4.6	1.8	4.1	1.3	5.5	1.9	5.8	2.8	13.8	6.6	1.6
1911-1920	2.2	-1.0	11.7	8.2	2.7	-1.5	31.9	27.8	15.1	6.0	1.8
1921-1930	6.1	2.8	10.1	6.5	9.3	4.6	24.5	20.4	17.5	6.6	2.6
1931-1939	5.0	2.3	6.8	4.0	2.7	-0.2	3.7	0.9	21.5	7.3	3.1
1950-1960	5.1	0.3	6.8	1.8	6.4	-0.5	10.5	5.3	12.5	8.6	5.4
1961-1970	8.8	6.5	15.6	12.9	14.4	10.9	18.0	15.2	17.5	10.4	7.7
1971-1980	8.6	7.1	9.4	7.7	7.3	5.4	12.5	10.8	20.7	11.6	9.4
1981-1990	7.0	4.7	5.9	3.4	7.7	4.2	4.9	2.4	22.6	11.3	11.6
1991-2000	7.2	4.5	7.6	4.7	8.5	5.3	9.9	6.9	16.7	10.0	7.6
1900-1939	4.5	1.5	8.2	5.0	5.1	1.2	16.8	13.3	17.0	6.6	2.0
1950-2000	7.2	4.6	9.1	6.1	8.9	5.1	11.2	8.1	18.0	10.4	8.4

Sources:
[1900-39 and 1950-59] Sugimoto (2009), [1960-1995] Department of Statistics, Singapore (1996).
[1995-2000] Asian Development Bank (2001).

Abbreviations:
TGC= Total Government Expenditure, **GFCE**= Government Final Consumption Expenditure
GFCF= Government Fixed Capital Formation

3.2.2 Changes in the Composition of Government Expenditure

As is described above, government spending was initially mostly limited to the maintenance of law and order, external security, and to the provision of limited government services and investments. However, over the subsequent decades, government expenditure increased significantly. In the case of OECD countries, notable increases were observed in the area of social expenditure.[4] As presented in Table 5, the share of government expenditure on Law, order and defense, education, health, pensions to GDP has gradually increased over the period. This was mainly due to the increasing government obligations, or, seen from another side, of citizens' entitlements in the social area (Tanzi and Schuknecht, 2000:32). Particularly, expenditure on education has been regarded as a function of economic growth and equity, social stability and democratic values.

[4] This category includes education, health, pensions, unemployment benefits and other transfer programs.

Table 5
Percentage Share of Government Social Expenditure to GDP
(Average of OECD Countries*)

Type of Expenditure	About 1870	About 1910	1913	About 1930	1937	1960	1980	1993	1996
Law, order and defense expenditure								4.1	3.7
Education	0.6		1.3		2.1	3.5	5.8	6.1	
Health		0.3		0.4		2.4	5.8	6.4	
Pensions			0.4		1.9	4.5	8.4	9.6	
Unemployment					1.3	0.3	0.9	1.6	2.7

Sources:
Law, order and defense expenditure: OECD (2007:195).
Education, Health, pensions, Unemployment: Constructed based on Tanzi and Schuknecht (2000:34, 38 , 41 and 43).
Notes:
Law, order and defense expenditure covers the police forces, intelligence services, prisons and other correctional facilities, the judicial system, and ministries of internal affairs.
(*) refers to Australia. Austria, Belgium, Canada, France, Germany, Ireland, Italy, Japan, Netherlands, New Zealand, Norway, Spain, Sweden, Switzerland, United Kingdom and United States.

It is interesting to observe whether Singapore experienced a similar pattern of government expenditure. Table 6 provides share of government expenditure on (1) defense, justice and police, (2) education, (3) health and (4) social security and welfare against GDP in Singapore for the twentieth century. Several observations can be drawn. Firstly, the government expenditure on defense, justice and police remained high throughout the twentieth century despite some fluctuations being observed in the pre-WWII period. Unlike other categories of government expenditure, defense expenditure makes little or no direct contribution to economic development (Lim Chong Yah, 2004:241). However, this expenditure was considered essential to maintain peace and order in Singapore. In 1964, expenditure for this category experienced a sudden drop due to the historical fact that Singapore became a part of the Federation of Malaysia, which bore to undertake expenditure for this purpose. After the attainment of independence in 1965, the percentage share of defense remained high as during the pre-1963 period. This implies that government expenditure on defense was one of the indispensable areas for the establishment of internal and external security of Singapore.

Table 6
Singapore: Percentage Share of Expenditure to GDP by Major Objects at Current Prices (%) Selected Years

	Defense, Justice and Police	Education	Health	Social Security and Welfare
1900	1.2	0.3	0.5	0.3
1905	1.1	0.2	0.7	0.4
1910	3.1	0.2	0.5	0.3
1915	5.5	0.2	0.5	0.3
1920	3.3	0.2	0.4	0.3
1925	3.1	0.3	0.5	0.2
1930	2.9	0.4	0.6	0.2
1935	3.2	0.5	0.6	0.2
1952	1.2	1.3	0.7	0.7
1955	2.6	2.7	1.8	1.0
1960	1.6	2.7	1.5	1.0
1964	0.1	3.9	2.4	1.8
1970	5.7	5.4	1.4	1.0
1975	5.5	4.8	1.1	0.9
1980	5.2	4.1	0.9	0.9
1983	4.2	4.9	1.4	0.3
1990	5.1	4.3	1.0	0.5
1995	4.7	3.1	1.2	0.8
2000	4.8	4.0	1.0	0.7

Sources:
1900-39: Constructed by Author.
1950-60: Lee Soo Ann (1974).
1965-80: Department of Statistics, Singapore (1983).
1985-2000: Asian Development Bank (2001 and 2005).

Secondly, share of government expenditure on both education and health to GDP was recorded at very low levels throughout the pre-World War II period. These categories can be interpreted as contributing to investment in human and social capital and are priority areas for the government. In this sense, it is clear that the British colonial authority did not pay as much attention to these expenditure categories. The post-war period saw the share of government expenditure on education increase steadily over the years. However, government expenditure on health remained small even during the period of self-government period. In fact, the share of health expenditure in Singapore was much lower than that of other OECD countries. This is because the healthcare system of Singapore differed from those in the United States and Western Europe. The goal is to provide quality healthcare for all Singaporeans at minimal cost to society by relying on a combination of public and private service delivery, but without a national health insurance system. Nonetheless, Singapore's healthcare system was ranked among the most successful in the world in terms of cost-effectiveness and community health results (Ghesquiere, 2007:67 and 69).

Thirdly, not unlike health expenditure, government outlays for social security and welfare were very low throughout the century. It amounted, on average, to less than 1 percent of GDP in 1990-2001, compared with 13 percent in the typical OECD country. In Singapore, old-age security is seen as being primarily the responsibility of the individual and family, followed by the community through charity, with the state acting only as a last resort.[5] There is no formal unemployment insurance scheme. Indirectly, individuals out of work have to rely primarily on accumulated savings or family support.[6] Relating to this, the Central Provident Fund, which was put in place in 1955 played significant role. This compulsory savings scheme has relieved the budget for much of the social security expenditure.

In short, the share of government expenditure to GDP during both the British colonial government and the period of self-government remained small. In particular, share of government expenditure on social welfare (exclusive of education) did not show any expansion while those of other OECD countries experienced continuous increases over the period. It is, however, essential to note that there are notable differences in the management of government expenditure between the British colonial period and the period of self-government. The British colonial government, as is argued above, always aimed to create a balanced or even a surplus budget structure so as not to burden the colonial home government. Thus, the priority was not to foster the improvement of the quality of government services and their effectiveness. On the other hand, self-government consciously limited the growth of expenditure by focusing on quality service and competitiveness. In the process of budgeting, every government

[5] Public pensions are limited to holders of political positions, the judiciary, and top civil servants and military officers (Ghesquiere, 2007:53).

[6] If these are absent, the government provdes a social safety net as a last resort, but this is subject to stringent means-testing. Government resists introducing entitlement programs, emphasizing instead retraining and incentives that foster job creation. (Ghesquiere, 2007:54).

department is required to specify its output and set performance targets as part of the annual budgetary process. These targets are monitored and form the basis for evaluating the performance of the departments. By doing so, the driving force of budgeting is shifted from resource requirements to output performance.

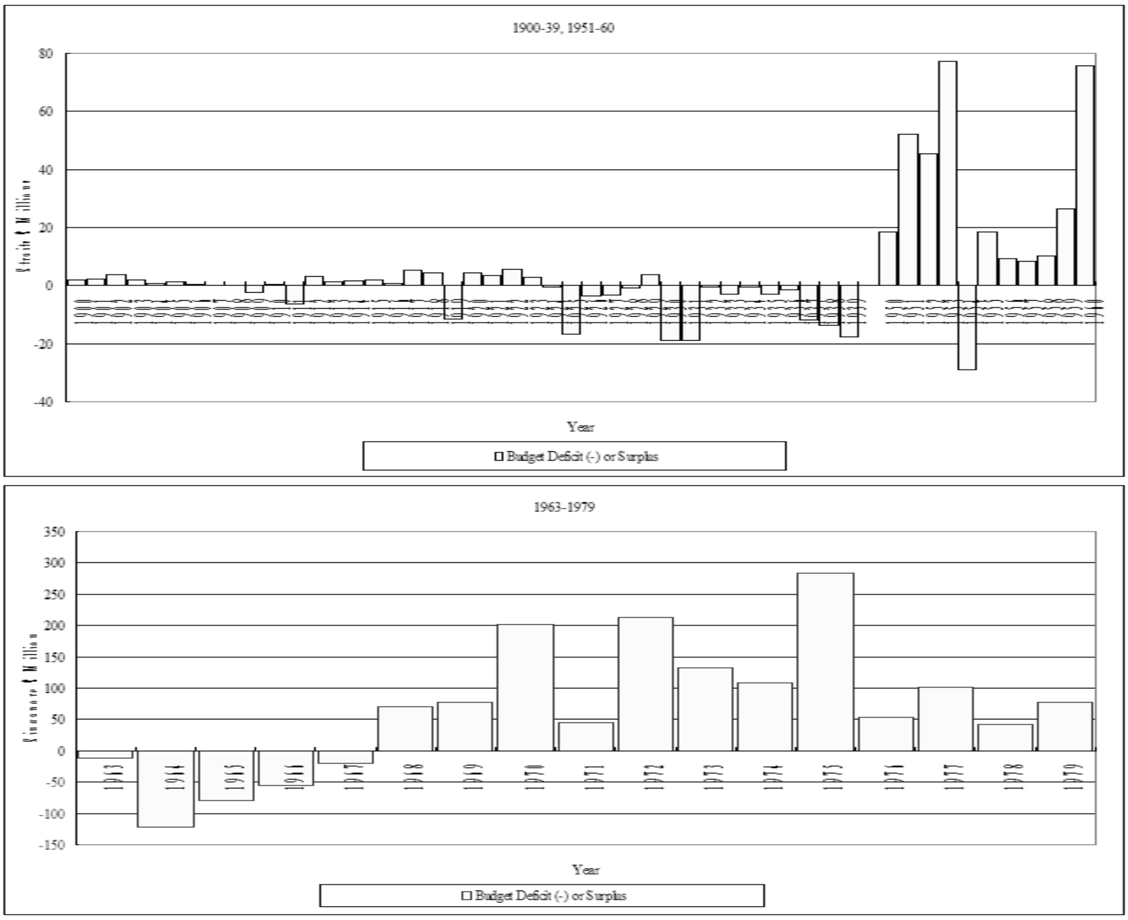
3.3 Budget Surplus/Deficit and Financial Assets

Putting together the revenue and expenditure side of the government sector and added to it that for the statutory boards to arrive at the overall balance for the government sector. Figure 5 shows the overall budget surplus / deficit of Singapore for the twentieth century.[7] Prior to 1920, the balance of surplus/deficit was relatively negligible, except for a couple of years (1911 and 1919). However, substantial deficits were recorded since 1925. During the Great Depression years of the 1930's and the years thereafter, Singapore recorded continuous budget deficits. This picture was somewhat different from the other Malay states (Sugimoto, 1997 and 2007a) which relied on revenue source from export duties. The reduction of revenue collected from the sale of opium/chandu had a major contributory effect on the decline of revenue raising capacity in Singapore and this led to the emergence of budget deficit despite attempts by the Colonial government to seek alternative revenue sources in the form of import duties, amongst the major being import duty from petrol. In line with this, it cannot be denied that the British colonial government in Singapore could no longer maintain a balanced budget since the 1920s. This issue, however, need to be examined from the wider scope. From the view point of the British colonial authority, Singapore somewhat functioned as a part of British Malaya. As described before, the Federated Malay States, Johore and Kedah had recorded continuous government budget surplus. This is mainly because those states could receive export duties which were imposed on primary commodities such as rubber, tin and etc. Instead, Singapore has served as

[7] Due to the lack of information on statutory boards, figures prior to 1960 only refer to the Colony and Municipality / City Council.

entrepot. During the period, the Colony of Straits Settlements issued loans and it was purchased by other wealthy states of British Malaya.[8] In this regards, Singapore have played functional role. However, in the immediate post World War II period Singapore recorded continuous budget surpluses over time. Lee Soo Ann (1974) found that the British colonial budget management paid special attention to achieving budget surpluses for the period 1948-60. In fact, there were significant differences between the budget estimated and the actual expenditure and revenue figures. Naturally, this led to the accumulation of budget surpluses and substantial amounts were allocated for foreign asset holdings.[9]

Figure 5
Singapore: Budget Deficit (-)/ Surplus at Current Prices, 1900-1939, 1950-79 and 1980-2000



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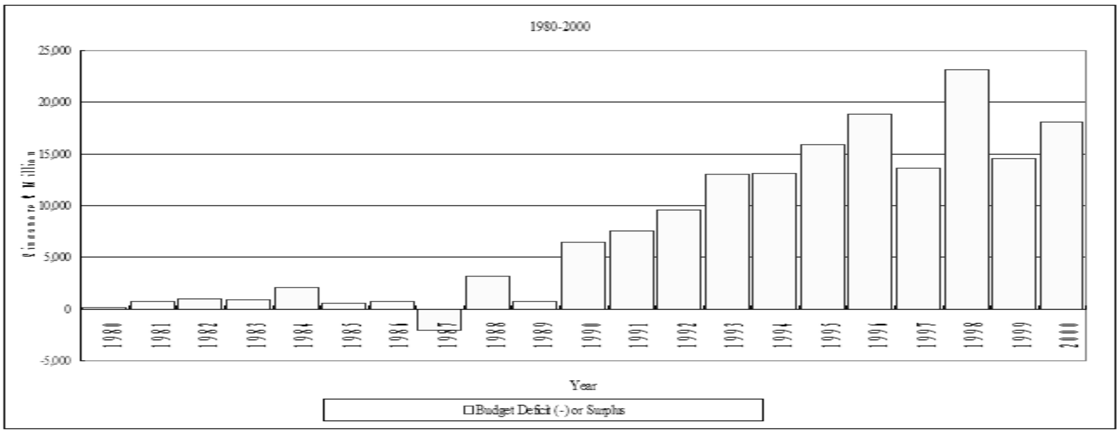
[8] For example, The Straits Settlements' 7 per cent Loan was issued on 26th April 1921 at the amount of $20,216,300 and wholly purchased by Colonial governments of the territories of British Malaya, namely the Federated Malay States Government ($15,000,000), Johore Government ($800,000), Singapore Municipality ($3,500,000) and Penang Municipality ($916,300) (Annual Report, Colony of Straits Settlements, 1921, pp.12-13).

[9] A similar phenomenon was observed in the Malayan state of Johore prior to World War II (Sugimoto, 1997, 2007a).



Sources: [1900-39, 1950-60] Sugimoto (2008), [1960-2000] International Monetary Fund, Deartment of Statistics (2006).
Note: (1) Total Revenue = Total Revenue + Grant (2) Total Expenditure = Total Expenditure + Lending minus repayments.

This major transition was realized mainly due to the introduction of income tax and its steady expansion as a major revenue source. Excluding the early years of the 1960s and the year 1987, the government's prudent budgetary practices resulted in budget surpluses which have grown larger especially over the period 1990-2000. According to the Jang and Nakabayashi (2005), the government budget surplus amounted to on average 10.6 per cent of GDP during the 1990-2001 periods while a typical OECD country for the same period recorded a budget deficit to the tune of -3.6%.

4. Concluding Remarks

This study conducts comparative studies on government fiscal behavior and economic growth of Singapore between the colonial and post-colonial period. Firstly, this study conducts literature review and seeks the characteristics of colonial government finance behavior. Unlike self-government, the general principle of government finance behavior during the colonial period was the establishment of a balanced budget system so as not to create a financial burden to the colonial master's home country. To achieve this objective, the budgetary process was authorized by the people who represented the interests of the home country. Under these circumstances, the colonial government only undertook passive measures and did not implement any significant fiscal policy for economic growth.

Subsequently, the long-term transition of Singapore's government fiscal behavior from the viewpoint of revenue raising, expenditure allocation and budget management are examined. Based on the above observations, summarized below are the following main features of government finance of Singapore. **Firstly,** the implementation of various measures by the government to raise revenue and allocate expenditure had undergone major structural changes between the pre-war and the post-war periods. In the pre-war period, revenue collection was almost entirely based on the sales of opium/chandu since its free port status precluded imposition of export duties, a privilege enjoyed by the Malay States of British Malaya. For several years, the British colonial government attempted to introduce income tax but failed to do so due to strong objections from its residents. Initially, Singapore managed to sufficiently obtain revenue to meet the size of its expenditure. Nevertheless, over the years, the Colony of Singapore faced a situation of budget deficits since the 1920s as a result of increases in government expenditure.

The structure of government finance in Singapore has changed significantly after World War II due to the introduction of income tax and the complete abolition of revenue derived from the sales of opium/chandu by the British colonial authority. Within a short period of time, the size of revenue from income tax experienced an increase and this was matched by increases in government expenditure. In terms of budget management, the balance of government finance constantly showed a surplus since the 1950s. Importantly, this structure remained unchanged even after the attainment of independence and its absolute amount of budget surplus increased over time particularly so in the last two decades.

Secondly, it is possible to say that the government expenditure behavior was basically conservative and prudent throughout the period despite the differing underlying motives during the pre-war and post-war periods. In the pre-war period, one of the major concerns of British colonial authority was to attain a balanced budget or even budget surplus with a conservative spending tendency. In fact, large amounts of accumulated government budget surpluses were funneled to the British homeland and other British colonies in the form of portfolio financial investment. This principle, however, could not be sustained since the mid-1920s mainly due to the complete absence of earnings from export duty and partially due to the relative reduction of the revenue earnings from the sales of opium. However, the situation reverted to the original status in the post-war period. The British colonial government was again able to successfully obtain budget surpluses for most of the years after the introduction of income tax. After the formation of self-government, not only have budgetary surpluses been chronic but they have grown larger and larger over the years. By conventional wisdom, this budget operation should raise hackles of crowding-out and contractionary effects. Nevertheless, these effects have been obviated in part by the government recycling funds back into the economy. One way was been means of direct investment especially in the productive economic infrastructure projects as well as in field of education, training and health. Additionally, outside the domestic economy, investments by the state in global assets and activities brought in more investment income as well as secured a wider portfolio of investments. The point is that surpluses were productively utilized rather than locked up to cause potential adverse deflationary effects (Low, 1998:148).

Thirdly, based on the observation made above, it is possible to draw a hypothesis that government finance behavior under British colonial rule (particularly, prior to WWII period) could not afford to focus on the economic growth of Singapore. Maintaining the principle of "free port status" caused weakness in the revenue raising capacity. Under this serious constraint, government expenditure allocation must be highly constrained in order to maintain a balanced budget. Consequently, the British colonial government fiscal behavior was somewhat different from the type of government involvement experienced in the developed countries since the end of 1920s as described by Tanzi and Schuknecht (2000). In fact, as pointed out by Booth (2002) on the experiences in the Netherland Indies, the British colonial government's policy in Singapore also hardly reflected a conversion to Keynesian economics, but rather was a manifestation of its inability to allocate expenditures in the face of rapidly falling revenues.

On the other hand, the self-government period was one which was geared for the economic growth of Singapore. It is crucial to note here that the Singapore Government implemented efficient government intervention by maintaining the principle of a small-sized government though most of the developed countries experienced a rapid expansion in the share of government expenditure to GDP during the period of the 1960s-1970s. In developed countries, growing skepticism of excessive government intervention emerged in the 1980s due to the rising fiscal deficit and public debt. Governments of the developed countries reformed their policy regimes towards less state involvement and consequently led to cuts in public expenditure. However, many developed countries faced difficulties due to the past commitments and resistance of groups with strong entitlements on public spending (Tanzi and Schuknecht, 2000:20). In this sense, the principle of a small-sized government in Singapore established during the British colonial period spilled over to the period of self-government.

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