

# **Evaluation of Size of Public Sector in Malaysia**

Halimah Nasibah Ahmad<sup>1</sup>, Noor Afza Amran<sup>2</sup>, Nor Laili Hassan<sup>3</sup>

<sup>123</sup>TISSA-UUM & Universiti Utara Malaysia, Malaysia

Abstract — There are two important sectors in a country, namely, the public sector and private sector. Unlike private sector, public sector is liable to ensure that there is an effective, efficient and economical utilization of public funds or resources to achieve the objectives of the government. Malaysian public sector was highlighted as having a large proportion of civil service compared to other countries in the world. Hence, the issue has triggered the researchers to conduct the current study. Generally, the objective of this study is to evaluate the size of public sector in Malaysia based on the percentage of total public sector expenditure to GDP. This study adopted a descriptive approach and data on public sector expenditure was retrieved from the Economic Reports produced by the Ministry of Finance from 1980-2017. From the evaluation, it can be concluded that the size of public sector in Malaysia was slightly bigger in 1980s compared to 1990s and 2000 onwards. The trend after 1986 was decreasing and became stable from 2000 onwards.

Keywords—Public sector, Government, Size, Malaysia, Expenditure

# I. INTRODUCTION

Generally, the public sector is also referred to as the government sector. Unlike the private sector, the objectives of a public sector are to provide goods and services to citizens, fulfil legal requirements and achieve accountability and does not aim to maximize profit. Funds and resources come from the public and that there is no individual ownership for the money and public property. There are two conflicting views on government intervention in an economy. According to the writings of Adam Smith and Jeremy Bentham in the late eighteenth century, the liberal view requires the government to limit interventions [1] through the reduction of government spending and tax cuts to enable more resources to be managed by the private sector. A study by [2] showed that the private sector is more efficient in using resources to produce equivalent goods compared to the public sector. Those opposing government intervention argue that the government does not have a strong tendency to gain profits or to increase returns on money usage and would not likely be able to make decisions to efficiently allocate resources within the country.

On the other hand, views of the nationalists (Keynesian) argued that government intervention in the economy is necessary to correct some of the problems of economic failure [1]. For example, the government is required to improve the well-being of the community through redistribution of income and wealth. In addition, the government also needs to help the country achieve good economic growth and reduce problems such as inflation and recession.

Before Malaysia's New Economic Policy (NEP) was put in place in 1971, the Government was more likely to allow economic activities to be determined freely through the interaction of



actors in the market. The government sought to reduce dependence on rubber exports and tin ore. Public spending was used to provide the infrastructure required by the market. However, the Government changed the development strategy from neoclassical to high intervention in most of the country's economic activities in the aftermath of the 13th May, 1969 incident. In the wake of the riots, NEP was formulated as a social re-engineering and affirmative action program in 1971 to eradicate poverty as well as reducing and eliminating identification of race by economic function and geographical location.

Twenty years after its implementation, the NEP was replaced by the National Development Policy (NDP) in 1990. Nonetheless the government continued to pursue most of the NEP policies of affirmative action for Bumiputera (Bumiputera refers to the Malays and other indigenous people of Malaysia). The government has become an active participant in the Malaysian economy to realize the goals that have been decided through the NEP. However, in the mid-1980s, there was a 'paradigm shift' with the adoption of the market ideology in the light of changed situations and changing policy priorities of the government. As a result, the role of the government changed from direct intervention to an indirect and supportive one. The public sector was called for reforms to enable it to perform its new and emerging roles effectively. The major reform was the privatization policy which falls within the New Public Management (NPM) framework [3]. Implementation of the NEP, the NDP and the NPM framework has raised some issues related to the size of the Malaysian public sector. The public became concerned about the size of the public sector because when the size becomes larger, the public has to pay more taxes in accommodating the higher public spending of the government. Moreover, larger government size may affect the government's effectiveness in continuous improvement and nation development such as loss of international competitiveness [4] and it may lower the demand for exports and employment.

# II. PROBLEM STATEMENT

The size of the public sector differs across countries as well as across time periods [5]. There are several measures that can be used to evaluate the size of the public sector and among them are the amount of total public expenditures and total revenues to gross domestic product (GDP), tax collection as well as the number of public sector employment to total employment. In Malaysia, the issue of size of the public sector also been highlighted by Datuk Johari Abdul Ghani (Finance Minister II of Malaysia, 2016 – 2018). He claimed that the country's 1.6 million government employees form the largest proportion of civil service in the world [6]. Thus, the Malaysian Government has a major challenge in controlling the rising costs of running the public sector system. The Government's operating expenditure is expanding due to rising of emoluments. This issue has triggered the current research as previous studies are found limited. Hence, the objective of this study is to evaluate the size of the public sector in Malaysia based on public sector expenditures. This study is significant to the body of knowledge in the public sector literature as research that focused on the size of the public sector are limited especially in the Malaysian context. Therefore, this current research attempts to fill the existing gap and make a significant contribution to the body of literature on public sector. From the practical perspective, results of this study would be useful to public administrators, regulatory bodies, policy makers and academicians. This study is also important to the public to better understand the involvement of the government in the economy through policies of spending, taxation and borrowing. The larger the size of the public sector and increasing government intervention in



the economy will impose more burden to the public through higher tax liability. Hence, the expected results of this study will assist government in optimizing the size of the Malaysian public sector.

The remainder of this paper is organized as follows. The next section provides a discussion of the literature review while Section IV outlines the research methodology. The findings and discussions are reported in Section V, followed by conclusions and recommendations for future research in Section VI.

### III. LITERATURE REVIEW

# A. Public Sector Expenditure

Public sector expenditures is divided into two, namely, operating expenditures and development expenditures. Operating expenditures are expenditures that relate to daily activities of the government [7]. These expenditures are incurred continuously and repetitively. Federal Treasury Circular No. 5, 2004 divided the expenditures into five different objects, namely, (i) Emolument, (ii) Service and Supply, (iii) Assets, (iv) Grants and Fixed Charges, and (v) Other Expenditures. [8] provided details and examples of the expenditures by objects. Emoluments include salaries and wages, fixed allowances, statutory and contributions to employees, overtime allowances and other financial benefits. Supplies and Services consist of travelling allowances, good transportations, communication and utilities, rental, raw materials and stationery, repairs and maintenance, professional services and hospitality. Assets comprise of building maintenance, facilities and maintenance of facilities, vehicles and machines, animals, trees and vegetation. Grant and Fixed Charges include pensions and gratuities, debt service charges (domestic and external), grants and transfers to state governments (constitutional grants and other grants/transfers), subsidies, grants to statutory bodies and scholarship. Other Expenditures cover refunds and write-offs [8] [9].

Besides showing the operating expenditures according to different objects, the Economic Report 2015/2016 issued by the Malaysian Ministry of Finance also shows the break-down of the operating expenditures according to different sectors. There are five major sectors, namely, (i) Security (defence and internal security), (ii) Social Services (education and training, health, housing and others), (iii) Economic Services (agriculture and rural development, public utilities, trade and industry, transport and communications), (iv) General Administration (general services, refunds and reimbursements as well as foreign affairs services), and (v) Other Expenditure (debt service charges and transfer payments).

Development expenditures on the other hand, is a capital expenditure which is long-term and normally not repetitive in nature [7]. The characteristics of development expenditures are as follows: (i) huge amounts of allocation/capital is needed, (ii) involves long-term cash flows, (iii) requires large amount of loans, (iv) supervision and maintenance in future is needed, and (v) careful decision as well as consideration is necessary as it involves implication towards the public and nation.

Unlike operating expenditures, development expenditures are disclosed in the Economic Report according to four sectors only, namely, (i) Security (defence and internal security), (ii) Social Services (education and training, health, housing and others), (iii) Economic Services (agriculture and rural development, public utilities, trade and industry, transport and



communications), and (iv) General Administration (includes general services, maintenance and renovations).

# B. Size of Public Sector

The size of the public sector represents the share of the government resources in a national economy [10]. The size of the public sector is important to economic performance because via its taxing, expenditures and regulatory functions, the public sector can affect resource allocation and economic growth [11]. Several measures that can be used to evaluate the size of the public sector are the amount of total public expenditures and total revenues to GDP, tax collection as well as the number of public sector employment to total employment [12]. According to [13], the size of the public sector is often measured by comparing the amount of public spending to the national aggregate income. They defined the amount of public expenditures as total expenditures of the state and federal governments. A study done by [14] found that the public sector in Malaysia is affected by decisions on public expenditures.

Reference [15] measured government size based on the share of government consumption in GDP, excluding interest payments, transfers and public investments. Other researchers agreed that the size of government should be measured by the resources it commands. This is obvious with regard to the government buying goods and services and employing people. These resources are taken from the private sector and employed for government purposes. If these purposes have greater value than their alternative value in private use (what economists call, "opportunity cost"), society as a whole is better off as a result. This is the economist's famous cost benefit test (https://wcoats.wordpress.com/ 2008/09/06/how-to-measure-the-size-of-government/).

The size of the public sector may increase due to rising population and in meeting broadening requirements of the welfare state in most countries. However, a larger public sector, as measured by the share of government expenditures in GDP does not necessarily imply a better satisfaction of public requirements [16]. Reference [17] documented the trends and changes in the size of government for transition economies. They suggested that the decline in the size of government in the transition economies was not due to purposeful policy, but rather, from their inability to obtain finances to sustain higher levels of government expenditures.

Reference [18] examined the impact of the size of government (percentage share of government expenditures to GDP) and public debt on real economic growth for a panel of 175 countries around the world. Specifically, the study test whether there is a negative relationship between economic growth and the size of government and whether there is a negative relationship between the size of public debt and economic growth. Their results showed that the size of government and public debt exerts a negative effect on real economic growth. Reference [19] used quarterly data from the first quarter of 1970 through the third quarter of 1994 for ten Organization for Economic Co-operation and Development (OECD) countries to examine the causal relationship between government size and economic growth. He found that government size caused economic growth, and that government size has an indirect effect on economic growth through investment and international trade.

A report provided by [12] found that the public sector in Sweden has varied between 54 percent to 56 percent in relation to GDP from 1999-2004, after about 70 percent in 1993 due



to crisis years. Income as proportion of GDP has also decreased between 1993 and 2004 but the reduction is not a large as for expenditure. Income increased up to 1999. However, there was a reduction from 60 percent in 1999 to 55 percent in 2004.

In comparing the size of the Malaysian public sector with other ASEAN countries (based on percentage of consumption expenditure to GDP), Reference [20] found that the size of the Malaysian public sector was bigger than that of Singapore and Thailand. In comparison to five OECD countries (Sweden, United Kingdom, Germany, United States and, Turkey), the size of the Malaysian public sector fall the second smallest of the OECD countries ranking.

In Latin America, [21] found that the evolution of the size of government has been uneven. It showed a rapid growth through the 1970s and early 1980s. The size of governments in Latin America declined significantly in the late 1980s following the debt crisis, and has remained fairly stable since the beginning of the 1990s. The average size of the government as measured by the expenditures of consolidated public sector stood at 28 percent of GDP in the 1990s.

#### IV. RESEARCH METHODOLOGY

This study adopted a descriptive approach to investigate the size of the public sector in Malaysia. The evaluation of the size of the public sector in Malaysia was based on public sector expenditures. Data on the size of the Malaysian government was retrieved from the Economic Reports produced by the Ministry of Finance from 1980-2015.

The following variables were used in the examination of the size of the public sector in this study:

- 1). Percentage of Public Sector Total Expenditures to GDP
- 2) Percentage of Federal Government Total Expenditures to GDP
- 3) Comparative Percentage of Federal Government Total Expenditures to GDP with Percentage of State Government Total Expenditures to GDP
- 4) Comparative Percentage of Statutory Body Total Expenditures to GDP with Percentage of Local Government Total Expenditures to GDP
- 5) Comparative Percentage of Federal Government Operating Expenditures to Total Federal Government Expenditures and Percentage of Federal Government Development Expenditures to Federal Government Expenditures
- 6) Comparative Percentage of Federal Government Operating Expenditure to GDP, and Percentage of Federal Government Development Expenditures to GDP
- 7) Percentage of Federal Government Expenditures by Sector to GDP
- 8) Percentage of Federal Government Operating Expenditures to Total Expenditures by Sector
- 9) Percentage of Federal Government Operating Expenditures to Total Expenditures by Object
- 10) Percentage of Federal Government Development Expenditures to Total Expenditures by Sector



Data for the Malaysia public sector was gathered and analyzed using the descriptive and trend analysis from 1980-2015. Data analysis used nominal values. Most of the variables used were based on the size of the economy i.e. Gross Domestic Product (GDP) on market price. In other words, the nominal size of the variables was compared to the nominal GDP in order to get a percentage of the economic share for the use of the variables.

## V. FINDINGS AND DISCUSSION

Total public sector expenditures include total expenditures for federal government, state governments, local governments and statutory bodies. However, total expenditures for the federal government is the largest compared to the state governments, local governments and statutory bodies. Figure 4.1 shows the trend of the percentage of public sector total expenditures to GDP from 1980-2015. The percentage of public sector total expenditures to GDP is one of the measurement used in this study to evaluate the size of the public sector. From 1981 to 1984, the trend is basically stable although decreasing. However, there was an increase in 1985 and 1986. The highest percentage was recorded in 1986 at approximately 36%. Then, in 1987 to 2000 there was a declining trend for percentage of public sector total expenditures to GDP. The lowest percentage was recorded from 1997 to 2000. This may due to the economic crisis which began in July 1997 and this was in line with the government's efforts to reduce less essential expenditures [22]. Public expenditures increased from 2000-2009 but there was a decrease again in 2010.

Figure 4.1 shows that the size of public sector expenditures was larger in the 1980s. The possible explanation is the expansionary fiscal policy practiced during the time to control for the effects of the world economic downturn from overwhelmingly affecting the country's economy. In other words, the government increased spending in order to boost the weak aggregate demand and weak private investment during the 1980s [20], [22]. The prolonged recession in the OECD countries significantly affected the Malaysian economy during the time. Economic activity in Malaysia slowed down due to a fall in export income which affected the domestic demand. The growth in the government revenues was also affected due to lower collections from income taxes and export duties [22]. After 1986, the size of public sector expenditures decreased and this was consistent with the Malaysian government's commitment to reduce the size of the public sector [23]. This was proven via the withdrawal of the public sector participation from its privatization policy. The results are consistent with a study done by [14] where the public sector in Malaysia is affected by decisions on public expenditures.



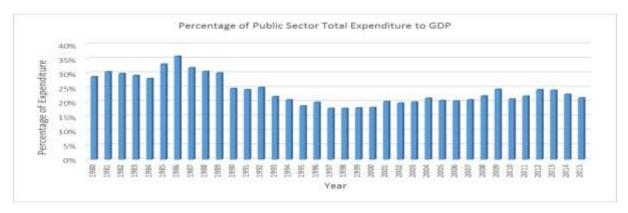


Figure 4.1 Percentage of Public Sector Total Expenditures to GDP

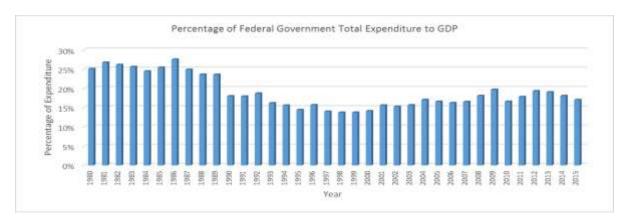


Figure 4.2 Percentage of Federal Government Total Expenditures to GDP

Figure 4.2 shows an almost similar trend for the percentage of federal government total expenditures to GDP as the trend for the percentage of public sector total expenditures to GDP. This is not surprising as the federal government is the most significant composition of the Malaysian public sector as compared to state governments, local governments and statutory bodies. This also demonstrates the importance of the federal government in the country's public sector consistent with provisions of the Federal Constitution (Article 96 to 112) which provides great fiscal power and responsibility to the federal government as compared to the state and local governments. According to [24], federal government expenditures makes up over 80 percent of total government expenditures of the federal and state governments.

Figure 4.3 shows a comparative trend of the percentage of the federal government and state governments total expenditures to GDP. Total expenditures for the state governments was more stable compared to total expenditures for the federal government although it showed a decreasing trend. Total expenditures were higher in the 1980s as compared to the 1990s and 2000s for both the federal and state governments. The economic downturn during the 1980s as discussed earlier might be the reason for the higher expenditures during the period. Figure 4.3 shows that the average percentage for state governments was approximately less than 10 percent from 1980-2014. Therefore, it can be said that the state governments are less significant compared to the federal government in the Malaysian public sector.



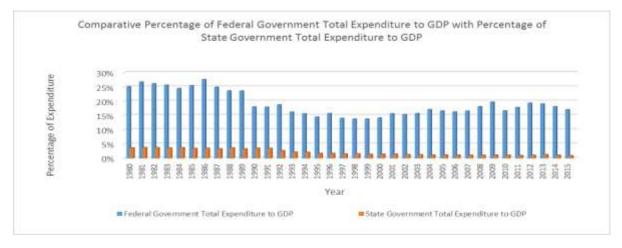


Figure 4.3 A Comparative Trend of the Percentage of Federal Government Total Expenditures to GDP with the Percentage of State Government Total Expenditures to GDP

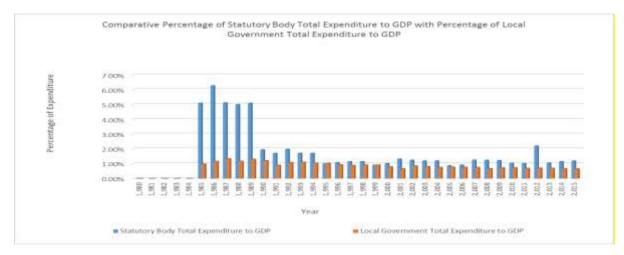


Figure 4.4 A Comparative Trend of the Percentage of Statutory Bodies Total Expenditures to GDP with the Percentage of Local Government Total Expenditures to GDP

Figure 4.4 compares the percentage of total expenditures to GDP between local government and statutory bodies. It shows that the percentage of total expenditures to GDP for local government was more stable during 1985-2015 while total expenditures to GDP for statutory bodies was high during 1985-1989, decreased in the early 1990s and remained quite stable in later years.

As mentioned earlier, national expenditures can be divided into operating, and development expenditures. Figure 4.5 compares the percentage of operating expenditures and development expenditures for the federal government with total federal government expenditures. Overall, the findings showed that the allocation for operating expenditures was larger compared to development expenditures throughout the period of the study. It is common for a government to spend more on operating expenditure. This is because operating expenditures involved expenditures of daily activities which are repeated, continuous and covers the charged and



supply expenditures [7]. Figure 4.5 also shows that when the federal government increased the allocation for development expenditures, it reduced operating expenditures. However, there was no significant reduction in the operating expenditures as it involved expenditures such as emolument, services and supply etc.



Figure 4.5 Comparing the Percentage of Federal Government Operating Expenditures to Total Federal Government Expenditures with the Percentage of Federal Government Development Expenditures to Federal Government Expenditures

Figure 4.6 shows the comparative trends for the percentage of the federal government operating expenditures and development expenditures to GDP. In general, the percentage of the operating expenditures to GDP was higher than the percentage of the development expenditures to GDP. Figure 4.6 also shows that the percentage of operating expenditures to GDP was higher in the 1980s compared to the later years. For the percentage of development expenditures to GDP, the highest was reported in 1981 while the lowest were reported in 2014 and 2015. More allocation was provided in 1981 to finance new projects under the Fourth Malaysian Plan (FMP) as well as for projects carried over from the Third Malaysian Plan (TMP). The high allocation reflected the government's continuous efforts to achieve the objectives of the New Economic Policy (NEP) in the context of an expanding economy [22]. On the other hand, less allocation was provided for development expenditures in 2014 as noted in the Economic Report (2013/2014, page 165), "Development expenditure will be allocated a marginally lower sum of RM44.5 billion or approximately 17% of the total expenditure in 2014, consistent with spending needs of ministries and government agencies".



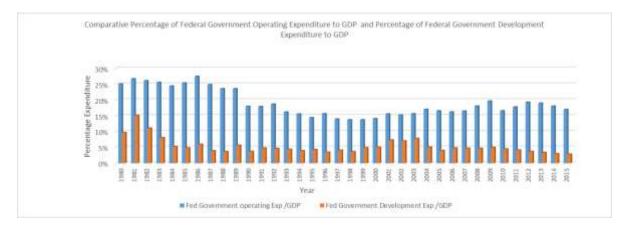


Figure 4.6 Comparative Percentage of Federal Government Operating Expenditures to GDP and Percentage of Federal Government Development Expenditures to GDP

Figure 4.7 shows the percentage of federal government expenditures by sector to GDP. Basically, there are five sectors, (1) Security, (2) General Administration, (3) Social Services, (4) Economic Services, and (5) Other Expenditures. Expenditures for the Security sector are allocated for defense and internal security. The General Administration sector is related to efforts to enhance productivity as well as to improve the public sector delivery system. The Social Sector expenditures are allocated for education and training including research and development (R&D), and housing and health. Expenditures for the Economic Services sector are to develop transportion infrastructure, enhance trade and industry, improve public utilities and energy as well as to accelerate agriculture and rural development. Other Expenditures cover refunds and write-offs [8], [25].

Figure 4.7 shows that, generally, the government spent largely on Other Expenditures, followed by the Social Services, Economic Services, Security, and General Administration throughout the period from 1980 - 2015. Results showed that the government continued to focus on programmes and projects with high multiplier effect on economy, while ensuring the well-being of the people [22].

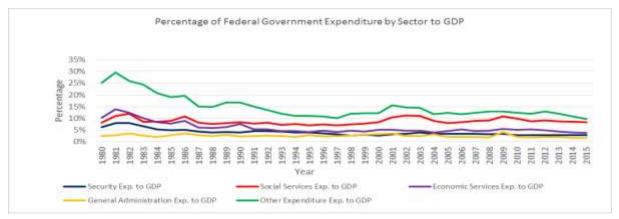


Figure 4.7 Percentage of Federal Government Expenditures by Sector to GDP

Figure 4.8 shows the percentage of the federal government operating expenditures to total expenditures by sector. Generally, it shows that two sectors, namely, Other Expenditures, and Social Services received a higher percentage of the federal government operation expenditures.



It also shows a stable and increasing trend for the Social Services sector and from 1993 - 2015 operating expenditures for this sector was the highest compared to the other sectors. This reflects the government's greater efforts on improving the quality of life of the people. Programmes and projects aimed for improvements in the education, housing and public health sub-sectors were actively carried out. On the other hand, Other Expenditure showed the highest expenditures from 1980-1992, h owever the government spent less on this sector from 1993-2015. The Security sector was third followed by the General Administration, and Economic Services sectors. Generally, expenditures for the Security, General Administration, and Economic Services sectors were stable throughout 1980 - 2015.

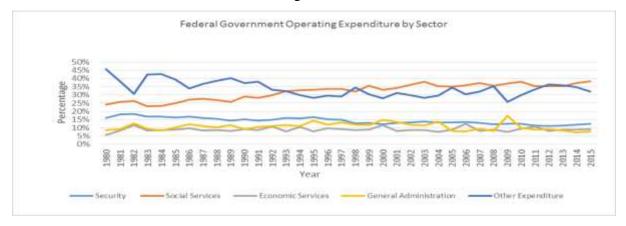


Figure 4.8 Percentage of Federal Government Operating Expenditures to Total Expenditures by Sector

Figure 4.9 shows the percentage of the federal government operating expenditures to GDP by object. There are five objects, namely emoluments, supplies and services, assets, grant and fixed charges and other expenditures. The percentage of the federal government operating expenditures to GDP was highest was for grant and fixed charges (retirement and debt charges, subsidy and social assistance, grant to statutory bodies, constitutional grant as well as grants and transfers to state governments) followed by emoluments, supplies and services, other expenditures and assets.

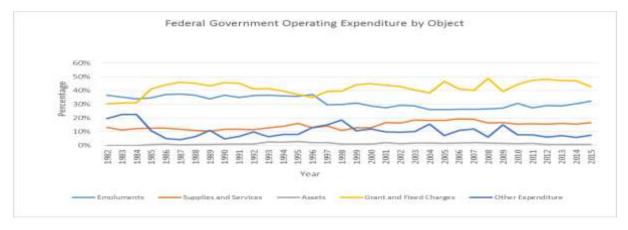


Figure 4.9 Percentage of Federal Government Operating Expenditures to Total Expenditures by Object



Figure 4.10 shows the percentage of the federal government development expenditures to total expenditures by sector. It was found that in terms of sectoral allocation, in general, the Economic Services sector accounts for the largest allocation followed by the Social Services, Security, and General Administration sectors. The Economic Services sector received a large allocation in tandem with government efforts to enhance the country's productivity and competitiveness. In general, expenditures in this sector was focused on developing infrastructure for transportation, enhancing industrial and entrepreneurial development, improving public utilities as well as accelerating agriculture and rural development. Expenditures allocated for the Social Services sector, the second largest component, was for the education and training, housing, and health sub-sectors. Expenditures for the Security sector was allocated to the defence and internal security sub-sectors. On the other hand, expenditures for the General Administration sector was allocated for programmes to enhance productivity as well as to improve the public sector delivery system [22].

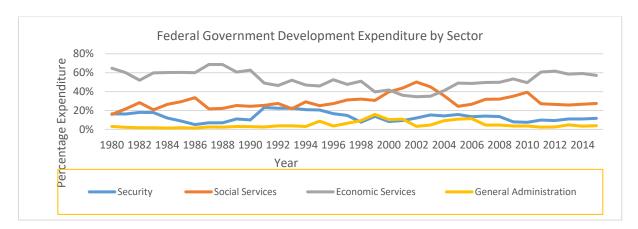


Figure 4.10 Percentage of Federal Government Development Expenditures to Total Expenditure by Sector

# VI. CONCLUSIONS, LIMITATIONS AND FUTURE RESEARCH

From the evaluation of the size of the Malaysian public sector based on expenditures, it can be concluded that the size was basically bigger in the 1980s. However, after 1986 there was a decreasing trend which became stable from 2001 onwards. The percentage of total public sector expenditures to GDP in the 1980s was between 25% to 35%, however, the percentage was less than 25% in the 1990s and onwards. As other reported research, this study is not without limitations. First, this research is descriptive in nature and it does not test any relationships between variables. Hence, for future research, studies can be conducted to examine the influence of public sector size on variables such as economic growth, government efficiency etc. Second, this study only evaluate size of the Malaysian public sector based on expenditures. Hence, future research can evaluate the size of the public sector based on public sector revenue and employment. Future studies can also compare the size of the public sector with other countries in ASEAN, Asia as well as other developed countries such as in Europe and United States. Thus, the generalisation made based on this study must be done carefully as the study has already addressed its limitations.



## ACKNOWLEDGMENT

Researchers wish to acknowledge Universiti Utara Malaysia (UUM) for the research grant awarded to conduct this study. We are also grateful to the dean and all our colleagues at the Tunku Puteri Intan Safinaz School of Accountancy (TISSA-UUM) for their intellectual comments and assistance in any manner, directly or indirectly.

## **REFERENCES**

- [1] O. Borre and J. M. Viegas, *Government Intervention in the Economy*, in *The Scope of Government*, O. Borre, and J. M. Scarbrough, New York, United States: Oxford University Press, 1995.
- [2] T. Borcherding, W.W. Pommerehne, and F. Schneider, "Comparing the Efficiency of Private and Public Production: The Evidence from five Countries," *Zeitschrift für National ekonomie, Supplementum, vol.* 2, pp. 127-156, 1982.
- [3] W. A. Nik Rosnah,.(2010). Public Sector Reform in Malaysia Addressing the Inequalities.

  Available at eprints.um.edu.my/11315/1/Rosnah\_Wan\_Abdullah\_WG111.pdfS.
- [4] A. Alesina and R. Perotti, "Fiscal Adjustments in OECD Countries: Composition and Macroeconomics Effects," *IMF Staff Papers*, Vol. 44, pp. 210-248, June 1997.
- [5] M. Katsimi, (1998). "Explaining the Size of Public Sector", *Public Choice*, vol. 96, pp. 117-144, July 1998.
- [6] Annonymous. (5 February, 2017). An Effective Civil Service Does Not Burden Government. The Star Online. Available at: https://wcoats.wordpress.com/2008/09/06/how-to-measure-the-size-of-government/
- [7] S. I. Syed Soffian, E. A. Engku Ismail, H. F. Faudziah Hanim, and H. Hassan, *Public Sector Accounting and Financial Management in Malaysia*, Kuala Lumpur: Malaysia: Pearson Custom Publishing, 2011.
- [8] O. Omar, I. Mohamad Sharofi, H.S. Siti Zabedah, H.R. Mohd Syahrir, M.S. Md Suhaimi, S. Rose Shamsiah, and M. L. Marlina, M.L. *Public Sector Accounting in Malaysia*. Singapore: Thompson Learning, 2007.
- [9] (2016) Malaysian Ministry of Finance, Available at: <a href="http://www.treasury.gov.my/index.php/en/economy/economic-data.html">http://www.treasury.gov.my/index.php/en/economy/economic-data.html</a>.
- [10] C. L. Lee, "Income Inequality, Democracy and Public Sector Size", *American Sociological Review*, vol. 70, pp. 158-181, Feb. 2005.
- [11] L. Di Matteo, Does the Size of Government Affect Economic Performance? Absolutely, Fraser Institute, 2016.
- [12] (2006) Statistics Sweden. Public Finance in Sweden available at www.scb.sè/statistik\_publikationer/OE0903\_2004AO1\_BR\_07\_OEO6SA0602.pdf.
- [13] C. V. Brown, and P. M. L. Jackson, *Public Sector Economics*, 3rd ed., Oxford: Basil Blackwell Ltd, 1986.
- [14] D. M. Mithani, and G. S. Khoon, "Casuality between Government Expenditures and Revenues in Malaysia: A Seasonal Cointergration Test," *Asean Economic Bulletin*, vol. 16(1), pp. 68-79, 1999.
- [15] A. Alberto, and R. Wacziarg, "Openness, Country Size and Government," *Journal of Public Economics*, vo. 69(3), pp. 305-321, 1998.
- [16] A. Afonso, and D. Furceri, "EMU Enlargement, Stabilization and Finance," *Journal of International Money and Finance*, vol. 27(2), pp. 169-187, 2008.



- [17] S. Gupta, L. Leruth, L. R. De Mello, and S. Chakravarti, "Transition Economies: How Appropriate is the Size and Scope of Government?" *Comparative Economic Studies*, vol. 45(40), pp. 554-576, 2003.
- [18] W. R. DiPeitro, and E. Anoruo, "Government Size, Public Debt and Real Economic Growth: A Panel Analysis," *Journal of Economic Studies*, vol. 39 (4), pp. 410-419, 2012.
- [19] K. H. Ghali, "Public Investment and Private Capital Formation in a Vector, Error-Correction Model of Growth," *Applied Economics*, vol. 30(6), pp. 837-844, 1998.
- [20] J. A. Siti Alida, and N. A. Halimah, "Penilaian Saiz Sektor Awam di Malaysia Semenjak Dasar Ekonomi Baru dan Perbandingan Dengan Beberapa Buah Negara," Sekolah Pembangunan Sosial. Universiti Utara Malaysia, 2001.
- [21] E. Stein, "Fiscal Decentralization and Government Size in Latin America," Working Paper No. 368, Office of the Chief Economist, Inter-American Development Bank, 1998.
- [22] Economic Report, Ministry of Finance, Malaysia. Kuala Lumpur: Percetakan Nasional, 1980 2017.
- [23] Mid-Term Review of the Fifth Malaysian Plan 1986-1990, Malaysian Government.
- [24] (2015), B. A. L. Leslie, "The Optimal Level of Government Expenditure in Malaysia." Available at: <a href="http://ir.unimas.my/12335/1/The%20optimal%20size%20of%20government%20expenditure%20in%20Ma">http://ir.unimas.my/12335/1/The%20optimal%20size%20of%20government%20expenditure%20in%20Ma</a>
- [25] (2016) Ministry of Finance Malaysia. Available at: <a href="http://www.treasury.gov.my/index.php/en/economy/economic-data.html">http://www.treasury.gov.my/index.php/en/economy/economic-data.html</a>