

Chapter 1

INTRODUCTION

1.1 A Brief Account of Thai Government Expenditure

In Thailand, there has been a tremendous increase in the size of government expenditure (as defined in Chapter 3) during the period 1960-1979. In absolute terms Thai government expenditure at current prices was 7133 million bhat (the unit of Thai currency which is approximately equal to US3.6 cents at present) in 1960 and rose to 102719 million bhat in 1979. The annual average rate of growth¹ of government expenditure at current prices was 13.7 per cent. At constant prices of 1975, government expenditure grew by an annual average rate of 9.4 per cent which resulted in more than fivefold increase in its volume in twenty years. Over the same period, government revenue at current prices grew at a slower rate of 12.8 per cent per annum.

The period under consideration has been also marked by considerable changes in the relative growth rates of the major components of government expenditure. For example, in the 1960s, the growth in government capital formation dominated other components whereas in the 1970s the growth of defence and education was faster than others.

From the point of view of employment, a growing proportion of the working population of Thailand is now engaged in government service. In 1979, 5.22 per cent of the working population was employed by government compared with 3.71 per cent in 1971.

When the growth of government expenditure is compared with that of national product the story is similar. At constant prices of 1975, about 12 per cent of Thailand's gross national product (GNP) was attributable to the government in 1960; by 1979 this share was almost 20 per cent. The rising share of government expenditure in GNP is not a unique experience to Thailand. In fact most of the nations in the world have experienced a similar pattern irrespective of their economic and political systems and ideologies.

1.2 Aim of the Study

The aim of this study is to identify the determinants of the growth of government expenditure in Thailand.

Wagner (1883, 8) propounded his law of "expanding scale of state activity" more than a century ago. His law has been a focal point in the studies of government expenditure in modern times. Thus, following Wagner, the central

working hypothesis of this study will be that the share of government expenditure in GNP rises with the level of economic development (measured by the level of per capita GNP).

Musgrave (1969) and Peacock and Wiseman (1979) argued that the determinants of government expenditure growth and development are not only economic. They consider political, social, demographic, technological, administrative and financial factors to have influence on government expenditure.

A changing volume of government expenditure, though used for satisfying collective needs, indicates important changes in the structure of the economy and also may indicate changes in political and ideological structures. Similarly the changing volume of government expenditure may affect the well-being of individuals in society by changing resource endowments and relative prices and hence individual preferences. Considering these implications it is perhaps fair to say that there may be very few aspects of economic policies which are more important than government expenditure.

1.3 The Problems

Although an attempt to formulate a positive theory of public expenditure started in the 1860s with Adolf Wagner, it is difficult to find a general theory that helps to explain the behaviour of public expenditure. As we will see in the next chapter much of the theoretical inferences have been made on the basis of various empirical findings which in turn were the products of different modes of explanations. That is, various explanations were addressed to the same phenomenon. Clearly there exists considerable difference in the explanations of the growth of government expenditure.

Recent development seems to have concentrated on the theory of collective choice which appears logically more satisfying. This too has been addressed to the situation of democratic nations. The theory of collective choice has no applicability to the situations of many countries where the voting system has no significant role or no role at all in shaping the government or in selecting government's activity. For a country like Thailand, governed by military dictators through almost the whole of the period under consideration, the theory of collective choice cannot be utilised to explain the behaviour of government expenditure.

Government activities may change greatly even over short periods of time and hence the level and/or the composition of government expenditure. The composition may change over time without any change in total expenditure. Moreover, government expenditure in sum is a bundle of heterogeneous goods and

services. At the same time, some items also exhibit some common features. As such, different items of government expenditure may be influenced by different factors and the same factor may influence different items. These characteristics make the task of explaining changes in government expenditure a complex one.

Before attempting to fulfil the objectives of this study there appeared a number of issues to be resolved. Firstly, it is necessary to explain the term government expenditure; secondly, it is important to decide which of the community's activities should be treated as the activities of the government, to what extent they should be accounted and in what form (gross or net). An even more fundamental question is how to measure the importance of government activity.

This study did not resolve such issues in a manner suggested in the literature, mainly because of the lack of information. In addition, available statistics on government expenditure did not permit a clear distinction of some categories of expenditures and thus compromises had to be made. However, Chapter 3 of this study mentions the definition, the criteria for separating "government" and "non-government" activities, the extent and form of accounting, and the measure of the importance, in relation to government expenditure. At the risk of repetition, these are mentioned very briefly at this point.

This study has adopted the definition of "general government" provided by the System of National Accounts (SNA), United Nations (1980). According to SNA the distinction between "private" and "public" is made on the basis of main financer and controller of the activity (United Nations, 1980). The data on government expenditure used in this study appears as a net series since SNA states that the sum is defined by purchases less their sales (United Nations, 1980). Following some earlier studies and the recommendations of some authors, this study has used gross national product (GNP) at constant values as a denominator to indicate the importance of government in the community.

It is desirable that the measure of the importance of the government mentioned above should reflect changes in the real share of government in the real product of the community. In practice, only current price values are available. A measure of the importance of government on the basis of money expenditure can be an illusion because of the possibility of changes in the price level in the economy as a whole and the government sector being of different magnitude and possibly even moving in different directions. A comparison of money expenditure between government sector and the economy as a whole can provide a true reflection of real changes only if the price level of the government sector changes exactly as the price level of the economy as a whole.

In fact, the changing share of government in GNP observed in the case of Thailand is enough to suggest that there exists differences in the changes of price levels between government sector and economy as a whole. This demands the use of different appropriate deflators. The problem is, again, the lack of sufficient information to construct appropriate deflators. However, an attempt has been made to use the best available deflators for GNP, government expenditure (and its components) and government revenue.

1.4 Techniques Used

In analysing the relationship between government expenditure (and its components) and other variables the following equational form has been used in addition to tabular and graphical analysis.

$$\log (\frac{G}{Y})_{it} = \alpha_i + \beta_i \log X_{it} + u_{it}$$

where,

$$X_{it} = Y_{pt}$$
$$i = 1 \dots n$$

$(\frac{G}{Y})_i$ = the ratio of government expenditure or of its components to GNP, at constant prices,

Y_p = per capita GNP, at constant prices,

X_i = other explanatory variables used (defined in their respective places, if used),

u_i = error terms,

α_i = constant,

β_i = elasticity coefficients, and subscript t denotes time period.

The reason for selecting the regression equations in log form is basically theoretical since the central hypothesis of this study, which is a test of Wagner's Law, is based on the elasticity concept. In addition statistical tests, carried out using Box-Cox Transformation² (Zarembka, 1974) led us to conclude³ that the estimates in log form are better.

As one would suspect in the analysis of time-series data, there was, except in the case of capital expenditure, the presence of auto-correlation. Fortunately, auto-correlation of first order only was present in all cases. Therefore, using the first order auto-regressive process the estimates were

made in the following generalised form of equations.

$$\log (\frac{G}{y})_{it}^* = \alpha_i \log C_{it}^* + \beta_i \log X_{it}^* + V_{it}^{\frac{4}{4}}$$

where,

$$(G/y)_{it}^* = (G/y)_{it} - \rho(G/y)_{it-1}$$

$$C_{it}^* = 1 - \rho$$

$$X_{it}^* = X_{it} - \rho X_{it-1}$$

$$V_{it} = U_i - \rho U_{it-1}$$

In addition, to avoid the loss of degrees of freedom, heteroscedasticity resulting from the above transformation has been corrected.⁵

For almost all cases three types of tests for statistical significance have been carried out. To determine the statistical significance of particular coefficients, t-tests and f-tests were used and to determine auto-correlation, d-tests were performed.

Before closing this section it is thought worthwhile to put a few words about the use of per capita GNP as a proxy for economic development. They are not the same. In fact economic development can be achieved without any increase in per capita income. If this happens to be the case then GNP per capita cannot be used to represent economic development. However, in a country like Thailand where quantitative growth and other aspects of economic development are taking place together it is expected that they have close association and hence per capita GNP can be used to represent economic development. Even in the case like ours there are problems, especially relating to distribution, which have been discussed by many writers (e.g. Seers, 1973). In this study per capita GNP and economic development have been used interchangably.

1.5 Outline of the Study

Including this chapter, this study has been organised in five chapters.

Chapter 2 contains a review of leading theoretical explanations concerning the behaviour of government expenditure. They are Wagner's law of increasing state activity, Peacock-Wiseman's displacement effect hypothesis, Baumol's theory of productivity lag (unbalanced growth), Rostow's theory on politics and the stages of growth, and political explanations.

Chapter 3 presents a description and analysis of total government expenditure. In doing so, firstly it attempts to remove the influences of price, population and income change from expenditure series and examines the relationship between government expenditure and revenue. It also discusses the weaknesses of the study of government expenditure at aggregate level.

In Chapter 4, the analysis of assumed relationship of various types of expenditures with various factors have been carried out and the results discussed. The case of substitution between government and private expenditure has also been discussed.

Chapter 5 presents a summary and conclusions.

Chapter 2

LEADING EXPLANATIONS OF THE RISING SHARE OF GOVERNMENT EXPENDITURE

2.1 Introduction

As mentioned in Chapter 1 government expenditure can be considered as one of the most important aspects of economic policies. Governments, in terms of their activity are getting bigger for many nations. Yet, comparatively little attention has been given to this aspect. A great deal of literature deal with tax reform and related subjects. The increase in taxes does not appear to have caused a rise in government expenditure but the other way (Bird, 1970). Compared to the theories of consumers' and firms' behaviour there is little with respect to government (Bird, 1970). According to Brown and Jackson (1978) the reason for traditional neglect of the analysis of government expenditure in public finance was the feeling that the level and structure of government expenditure were mainly determined by non-economic forces and were thus beyond the proper area of economists' study. Certainly this type of statement has not stopped economists in making enquiries with respect to government expenditure.

Government expenditure is a complex bundle and as such its determinants are many. Musgrave (1969, 69) mentioned that the determinants of government expenditure development are not only economic. He advises to consider other forces, "conditioning and social factors". Peacock and Wiseman (1979, 19) recognized six broad groups of influences, each complex in itself. They are demographic, social, material, financial, technological, political and administrative. About a century ago, Graziani (1887, cited in Peacock and Wiseman, 1979; 5) also recognized that "objective factors" such as population and technological change might affect government expenditure growth.

2.2 Theory of Public Goods

Basically, the modern theory of public goods is concerned with three separate problems: (a) the requirement for the optimal provision of a public good; (b) the demonstration that the private market will fail to provide the optimal amounts of such goods; and (c) the problem of whether a political mechanism which will perform this task properly can be devised (Head, 1968, 210). Public good theory is essentially normative in nature. Like welfare theory, the normative theory of public expenditure is concerned primarily with establishing the requirements for achieving the optimal provision of

certain goods and services. Therefore, this aspect is not usually concerned with explaining what governments in fact do but rather what they should do. This aspect is not of interest to this study.

2.3 Positive Theory of Public Expenditure

Here the term "positive theory of public expenditure" refers to that body of economic and political analysis which attempts to understand and explain the observed pattern and level of government expenditures and changes in those expenditures over time. Thus the concern of this aspect is very different from that of normative analysis, and cost-benefit analysis plus other techniques related to the efficiency with which government expenditure programmes are executed.

2.3.1 Economic Explanations

2.3.1.1 Wagner's Law of Expanding State Activity

Adolph Wagner propounded his law of "expanding scale of state activity" by direct inference from historical evidence in Germany in the early 1860s. A modern formulation of Wagner's law is that as per capita income (a proxy for the level of economic development) rises the share of public sector will grow in relative importance (Musgrave 1969, pp. 73-75). The core of his argument, in his own words, is that:

the law [of increasing state activity] is the result of empirical observation in progressive countries, at least in Western European civilization; its explanation, justification and cause is the pressure of social progress and the resulting changes in the relative spheres of private and public economy. Financial stringency may hamper the expansion of state activities, causing their extent to be conditioned by revenue rather than the other way round, as is more usual. But in the long run the desire for development of a progressive people will always overcome these financial difficulties (Wagner 1883, 8).

For the explanation of the existence of law Wagner distinguished three types of state activity (Bird, 1970; Peacock and Wiseman 1967 and Brown and Jackson 1978). Those were:

- (1) administrative and protective services
- (2) education, culture, health and welfare services (social services), and

(3) the provision of investment.

For the first type of activity Wagner suggested its expansion because of the substitution of public for private activity. In addition new needs for public regulative and protective activity would develop as a result of the increased complexity of the legal relationship and communication that accompanied economic development. In order, also, to maintain the efficient performance of the economy in the face of the increased frictions of urban life.

The second type of state activity develops because they constitute "superior goods" or "luxuries". In other words, the income elasticity of demand for these services is greater than unity (i.e. an increase in per capita national product by 1 per cent would lead to an increase in the demand for public goods by more than 1 per cent) so that more of them would be demanded as income rises.

For the third type of activity Wagner suggested that the inevitable changes in technology and the increasing scale of investment required in many activities would create an increasing number of large private monopolies whose effects would have to be offset by the state, through the provision of public investment, in the interests of economic efficiency, and perhaps equity.

It is clear from the above statements that the law is concerned with the secular behaviour of expenditure. When the law of expanding state activity and no revenue constraint are considered together, Wagner's law implies the total socialization of production. His statement of the existence of such a law depends upon the validity of the organic theory of the state (Peacock and Wiseman 1967, 19). Because Wagner viewed the state as a being, with its own tastes and preferences, something quite different from the individuals comprising it. In this respect it can be argued that Wagner's analysis is weak because the relation between individual and government preferences and actions is too important and thus difficult to ignore (Bird 1970, 71). Considering the important relationship between government and individual in deciding the size of government activity, Meltzer and Richard (1981) have proposed an amendment to Wagner's law. Their hypothesis is that the size of government depends on the relation of mean income to the income of decisive voter, and with universal suffrage and majority rule, the voter with median income is decisive and is utility maximizer. Accordingly, when the mean income rises relative to the income of the decisive voter, taxes rise (relative size of government), and vice versa. The explanation is that voters with income below that of the decisive voter choose candidates who are in favour of higher taxes and more redistribution.

Musgrave (1969, 114) shows the evidence supporting Wagner's law in general. However the hypothesis of a rising government share was not supported by the relative size of government in the countries at the upper end of per capita income scale. The latter is supported by the findings of Gupta (1968, 32-35). Peacock and Wiseman (1967, vii) rejected Wagner's law concerning the ever-increasing proportion of government expenditure to community output on the basis of their hypothesis of displacement effect (which will be considered in the following section). Beck (1976, 15) infers with his evidence that the era of rising public share in most developed countries may have ended. Wildavsky (1975, 232-35) provides two different explanations regarding the share of government in relation with economic growth. Where the degree of economic expansion is rapid, as in Japan, any increased demand for public funds can be met by the added revenues obtained by applying a constant public share to larger national product and therefore the share of public sector does not rise. But where the economic growth is so modest that the generation of revenues is insufficient to meet increased demand for public funds the share of public sector rises. Cameron's (1978, 1251) analysis supports Wildavsky's argument.

After all Wagner's law is the product of historically established tendencies. Such observation, however long observed, never guarantee its permanent stability (Popper, 1960, 115).

2.3.1.2 The Displacement Effect

On the basis of British data Peacock and Wiseman (1967, xiii) discovered the displacements of the level of public expenditures associated with periods of wars or social disturbances. In interpreting their result they suggested that public spending grew over time, not at a constant rate, but broadly step-wise. Their explanation behind this type of expenditure growth, is quoted below.

When societies are not being subjected to unusual pressures, people's ideas about tolerable burdens of taxation, translated into ideas of reasonable tax rates, tend also to be fairly stable. Fixed, if low, rates of taxation are obviously compatible with growing public expenditure if real output is growing, so that there may be some connection between the rate of growth of real output and the rate of growth of public expenditure. Much more rapid rates of expenditure growth are unlikely; in settled times, notions about taxation are likely to be more influential than ideas about desirable increases

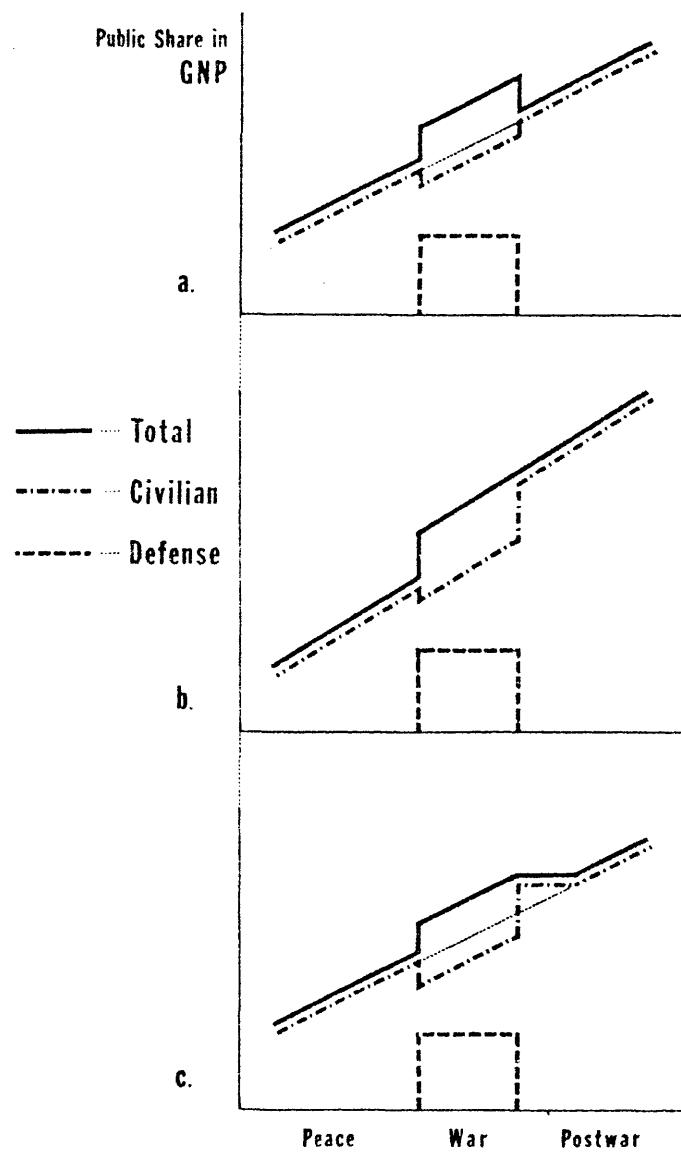
in expenditure in deciding the size and rate of growth of the public sector. There may thus be a persistent divergence between ideas about desirable public spending and the limits of taxation. This divergence may be narrowed by large-scale social disturbances, such as major wars. Such disturbances may create a displacement effect, shifting public revenues and expenditures to new levels. After the disturbance is over new ideas of tolerable tax levels emerge, and a new plateau of expenditure may be reached, with public expenditures again taking a broadly constant share of gross national product, though a different share from the former one (Peacock and Wiseman 1967, xxxiv).

Summarily, the principal way in which substantial increases in spending are brought about is therefore when a "social disturbance" sets in process some mechanism that raises the revenue restraint. In normal times, some connection between government expenditure growth and national output growth is expected.

The major dispute regarding the displacement hypothesis emerged from the question of what happens to expenditure in post-war period. The Figure 2.1 taken from Musgrave (1969, 88) illustrates the point. Figure (a) represents the case where there is no "displacement effect", after the war expenditures return to their pre-war trend line. The usual presentation of the "displacement effect" appears to postulate a pattern like that shown in Figure (b), where the wartime increase is more or less maintained as a result of a post-war upward shift in civilian public spending. It is the pattern shown in Figure (c), where post-war civilian expenditures show only a temporary increase until the old trend line is reached, is supported by Musgrave (1969) and Bird (1970).

Another weakness of the displacement hypothesis is its assumption that government spending is strictly dependent upon tax revenues. Regarding the developing countries Heller (1954, 6) and Oshima (1957, 386) stressed that the level of expenditure in under-developed countries depends much more heavily on the ability of the tax system to place the required revenues at the disposal of the government. This view of Heller, and Peacock and Wiseman, is contradictory to that of Wagner who expected any revenue constraint on government expenditure to be overcome in time by entrepreneurs. However, there appears to be some degree of reality in both.

Figure 2.1
Public Expenditure Patterns:
War and Post-War



Source: Musgrave, 1969, 88.

Government spending is not always dependent on tax revenues even in developing countries. The fact that the availability of foreign grants, loans and aids lessens the dependence of expenditure on taxes (Afxentiou 1983, 103 and Lotz 1970, 131). In addition, the ability of debt financing in various forms also plays the same role. On the other hand it is, perhaps, not reasonable to expect that there will be no revenue constraint for forever as Wagner expected. There may be some critical limit beyond which people are not prepared to bear the burden of taxes and the debt for future generations.

A further problem of the displacement hypothesis concerns about the ambiguity of what is a major social upheaval. The term "major social upheaval" has taken a variety of forms. For example, world wars, the great depression and anything that affects people's attitudes towards the public sector or toward economic development (Gupta 1967; Bonin et al. 1969; Musgrave 1969; Mann 1975). The point to be stressed is that different types of disturbances can have different scales of impact. Even the same kind of social upheavals may differ from country to country with respect to their effects and may be perceived differently by different people. Similar to the above the measurement and proof of displacement has taken various forms (Afxentiou 1982, 34).

Finally and importantly the displacement hypothesis is not helpful in explaining a secular upward trend during the periods of economic prosperity and political peace. Both of these conditions are experienced by majority of the nations in recent times.

2.3.1.3 The Productivity Lag

Productivity in the service sector has been assumed to increase at a slower rate than in the sector like manufacturing where technologically progressive activities allow for a cumulative rise in output per man hour (Baumol 1967). Government sector is similar to the service sector in the economy since both are mainly in the labour intensive activities. When the total economic activities of a nation are grouped into two types: public and private sector, the productivity in the former has been considered comparatively slower than in the latter. As such a rising proportion of national resources to public sector would be necessary simply in order to maintain a constant level of public services (Martin and Lewis 1956, 206; Williamson 1961, 46-47). If the case is of rising demand for public services the Wagner's law of expanding state activity is reinforced, though for a different reason.

For our purpose the Baumol model (1967) of unbalanced expansion can be adopted in the following way. Let the output of non progressive (government sector) be produced at a constant level of labour productivity whereas progressive sector's (private sector's) output per man hour grows cumulatively at a constant compounded rate, γ . Then at time t :

$$y_{gt} = \alpha L_{gt} \quad (2.1)$$

$$y_{pt} = b L_{pt} (1+r)^t \quad (2.2)$$

Where y_g and y_p denote the output of government and private sector. Similarly L_g and L_p are the quantities of labour employed in two sectors and a and b are constants. From the equations (2.1) and (2.2) the ratio of government output to total output (y_{nt}) can be expressed as

$$\frac{y_{gt}}{y_{nt}} = \frac{\alpha L_{gt}}{\alpha L_{gt} + b L_{pt}(1+r)^t} \quad (2.3)$$

where $y_{nt} = y_{gt} + y_{pt}$

Now further assume that both government expenditure (G_{et}) and private expenditure (P_{et}) are equal to the labour cost of producing their respective outputs and that the wage rate (w) is equal in both sectors. Then

$$G_{et} = w \cdot L_{gt} \quad (2.4)$$

$$P_{et} = w \cdot L_{pt} \quad (2.5)$$

Again the ratio of government expenditure to total expenditure (N_{et}) can be expressed using equations (2.4) and (2.5) as

$$\frac{G_{et}}{N_{et}} = \frac{w \cdot L_{gt}}{w(L_{gt} + L_{pt})} = \frac{L_{gt}}{L_{gt} + L_{pt}} \quad (2.6)$$

For simplicity it is also assumed that the supply of labour is constant, so that $L_t = L_{gt} + L_{pt}$.

From equation (2.3) it follows that as $t \rightarrow \infty$, given constant labour supply, the only way by which the ratio of government output to total output can be maintained constant is by transferring labour from the private sector to the public sector. In doing so, labour is transferred to relatively less productive sector. Then, given constant wage rate the ratio G_{et}/N_{et} must rise. The proposition is clear from equation (2.6).

The principal reason for the relatively slower growth of productivity in the government sector is that many government activities are highly labour intensive (Martin and Lewis 1956, 206). Therefore the productivity gains associated with economic growth are not manifested in public sector activities in the extent they are in private sector (especially manufacturing).

The concept of productivity lag, as Baumol (1967) argues, is also applicable to the service activities of private sector. In addition, as the importance of service industries increases in private (and total) output, one may even think that there may well be a situation where the assumed relative differences in sectoral productivity is reversed. But there is good reason to expect that certain very important government activities

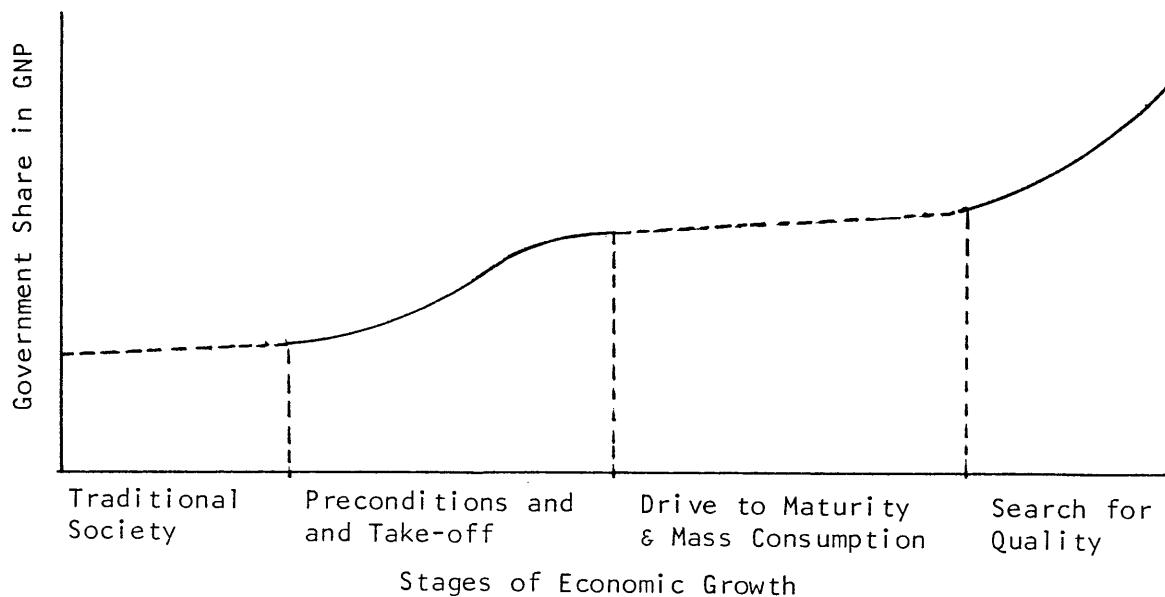
- education, administrative, protective, and partly health services - are labour-intensive in nature and will remain so and thus less productive. As a consequence the productivity offset to rising employment costs will be low. Moreover, many empirical studies have shown that the productivity of government activity is lower compared to the same activity in private sector. An extensive survey of such studies is presented by Borcherding et al. (1982).

2.3.1.4 Stages of Economic Development

This approach in explaining the growth pattern of government expenditure is best presented by Rostow (1971). And to some extent by Musgrave (1969), Lewis (1955) and Nurkse (1960). All of the above authors do agree about the importance and hence the larger need of government investment in the early stages of economic development. Therefore, in the early stages of economic development the importance of government investment in total national investment is increasing. At the later stages of economic development a falling share of government investment is expected (Lewis 1955; Musgrave 1969).

According to Rostow (1971) public investment is necessary to gear up the economy for "take-off". Public investment for institutional and material infrastructure must be paid from national product that is still relatively small. Hence there is a sharp rise in the state's claim on total economic resources. The take-off period includes the formation and/or modernization of bureaucratic administration particularly in financial and judicial administration. Later, during self-sustaining growth and drives toward technological maturity, the process of industrialization accompanying labour movement and political parties demand new social policies including social insurance systems and education with compulsory schooling. During this period, the share of public sector need not rise since economy is expanding rapidly. This continues into the stage of mass consumption. Afterwards, in what Rostow has called the stage of search for quality, negative effects of extensive industrial growth are realised. In addition, a growing awareness of the insufficient provision of public goods and services and an emphasis on redistribution issues lead to growing demand for social services (for example, welfare and education). All later development occurs in a situation of declining economic growth, therefore a rise in the ratio of public expenditure to GNP can be expected. Roughly, the relationship between government expenditure and stages of economic growth as devised by Rostow can be sketched as in Figure 2.2.

Figure 2.2
Share of Government Expenditure in Different Stages of Economic Growth



Rostow's theory provides a broad sweeping view of the development process of government expenditure which is, in fact, a generalization gleaned from the examination of different historic cases of growing economies.

2.3.2 Political Explanations

de Tocqueville (1835 [1965]) recognised the importance of the relation between government expenditure growth and the evolution of political institutions, particularly democracy. According to him the growth of government expenditure is positively related to the extension of the franchise. The explanation of this expectation, he provides is that:

... the government of the democracy is the only one under which the power which lays on taxes escapes the payment of them (de Tocqueville 1835 [1965], 150).

Stein Rokkan's (1970) theory of state and nation-building predicts a similar relation to de Tocqueville as regards the compositional change in government expenditure under various political systems. Broadly, the item defence is expected to be dominant in the system of "restricted suffrage" where as the item social services is expected to dominate other items in the system of "mass democracies". In a democratic society, the division of resources between the public and private sector is roughly determined by the desires of the electorate (Downs 1960, 541). The theory of democracy, as elaborated

by Downs (1957), implies that the contenders for political office alter their programmes in order to secure larger support from the community. An important weapon in this competitive struggle is the public economy. Some candidates attempt to generate more votes by promising tax cuts; others promise an increase in spending; and others promise both (Downs 1960; Buchanan and Wagner 1977).

Studies by Kramer (1971), Nordhaus (1975), Tufte (1975) and Lindbeck (1976) have suggested that periodic electoral competition brings promises to cut taxes and to increase spending by political parties and candidates who wish to win votes. Political office holders attempt to fulfil their election promises and may succeed in doing so. Hence countries with frequent elections are likely to have larger increases in their public sector than countries with less intense electoral competition. If it is true then unscheduled elections may lead to a rise in the share of public sector.

The ideological difference of governments in power has also been suggested as an explanation of public sector growth. Leftist parties are perceived as more favourable to greater government intervention in the economy than the parties of centre or right (Downs 1957, 116; Hibbs 1978, 165).

Another consequence of elections, suggested by Nordhaus (1975) and Lindbeck (1976) is the "political business cycle". This cycle is marked by increased spending and other reflationalary policies in the period immediately before and after an election. The ruling government attempts to raise spending on particular services to enhance their support in anticipation of election. At the same time the parties in opposition make similar promises to build electoral support. These suggest that public spending increases at an unusually rapid rate immediately before elections and immediately afterwards if the opposition party succeeds.

2.4 Summary

Wagner's law of expanding state activity emphasises the income elasticity of demand for public goods and services, along with the problem of market failure and increased complexity of the economy for the existence of such law. Peacock and Wiseman's approach was to look at the underlying politics of the fiscal system in an effort to explain the pattern of expenditure growth they had observed. They stressed the crucial role of war in the expansion of government activities. War is the chief way through which

the assumed socio-cultural limits on revenue could be altered, thus permitting an expansion of government expenditure. The productivity hypothesis, which is in fact a counterpart of Wagner's law, entirely focuses on the slower productivity increase in the government sector to explain the rising share of government in community's output. In Rostow's theory it was seen that the stages of economic growth reflect the role of government in providing various goods and services in varying degrees. Politically, the extension of franchise, the partisan and the frequency of elections all of them have been considered to influence the size and composition of government activity.

Comparing the complexity of problems with above explanations, it becomes apparent that none of the above explanations on their own are sufficient to explain the details of the changing process of government expenditure. To account for the various changes we need to look deeper into the factors that give rise to the formation as well as to the growth of government expenditure.

Chapter 3

GROWTH OF GOVERNMENT EXPENDITURE IN THAILAND

The study of Thai government expenditure of the period 1960-1979 begins with the examination of the effects of factor-prices, population and income change on government expenditure. First, however, the scope, definition, size and measure of government expenditure will be discussed.

3.1 Scope, Definition, Size and Measure

Owing to the availability of data the scope of government sector, in this study, has been limited in accordance with the concept of "General Government" as defined in the "System of National Accounts (SNA)" adopted by United Nations. According to SNA the institutional sector for "general government" covers all departments, offices and all other bodies (excluding quasi-corporate units) of all levels which are defined to be producers of government services (UN 1980, xiii). Accordingly, in this study, the term government expenditure relates to "General Government" unless qualified by its content. In the past, however, the terms; state, government, and public have been used.

The concept of general government is narrower than that of public sector which, in addition to general government, also includes a variety of organizations, notably public enterprises and other ad hoc bodies established by the government to undertake certain kinds of activities. Musgrave (1969, 73) is of the view that government enterprises should be included for the study of Wagner's law of expanding scale of state activity. Especially under the economic environment of developing countries where credit market is underdeveloped, small scale farmers and producers are dominant and entrepreneurial skill is scarce, the inclusion of corporate and quasi-corporate units established by government is justifiable. It is because they exist in the form of economic infrastructure to promote investment that would not have taken place otherwise. Chelliah (1973, 753-56) suggest to account government loans as expenditure on the part of government. This is because government loans are often provided to submarginal borrowers who have limited access to credit market and hence such loans do not represent simple financial intermediation as far as government is concerned.

Some economists consider the public sector more than simply public finance. The extent to which laws, regulations and contracts are formed and enforced can vary significantly the recorded amount of government expenditure

(Heald 1983, 19; Peters and Heisler 1983). Private sector also, as a result of laws and regulations incures costs in the sense that a great deal of government work is done by individuals as the task of filling and replying to numerous enquiries of the government (Bird 1970, 159). Thus, according to them, the consideration of only financial aspects is an incomplete and potentially misleading index of the size of the government.

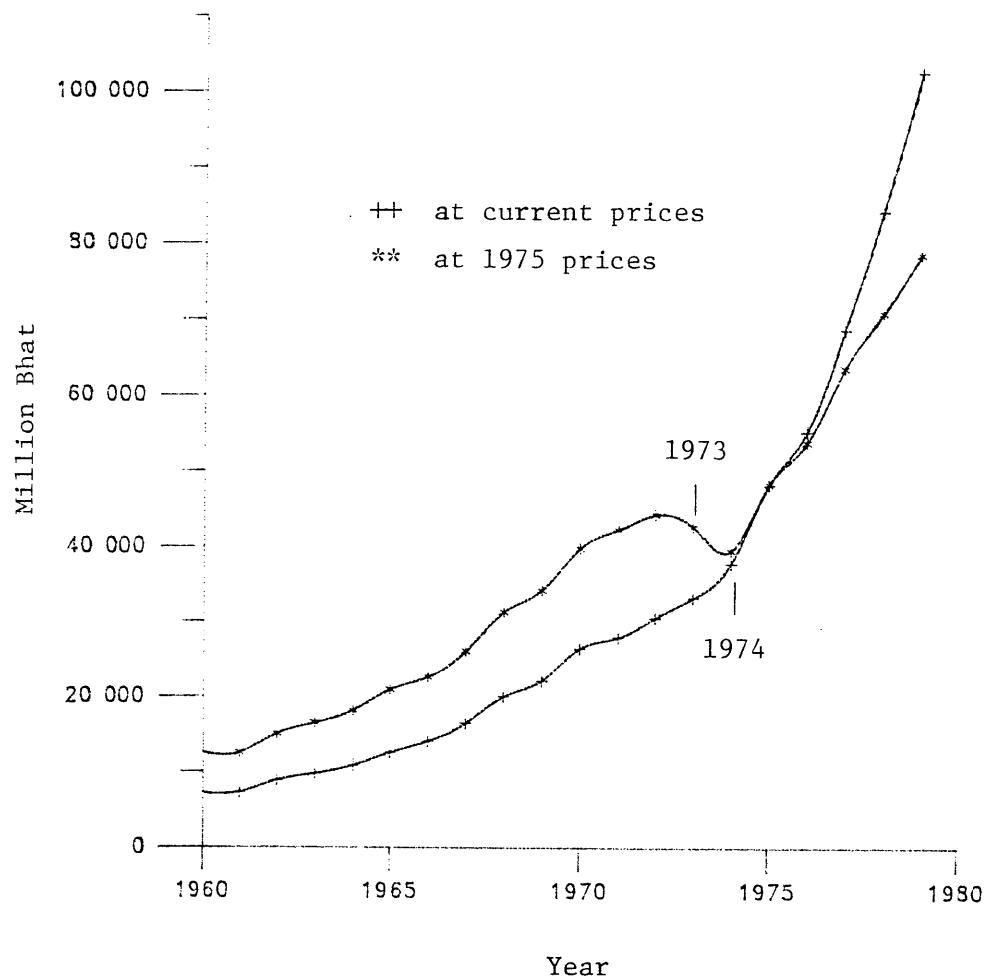
The decisions taken to determine the ownership of a particular activity also influences the size of government activity. According to SNA the distinction between "private" and "public" is based on whether they are "mainly financed and controlled" by public authority. Here the word "mainly" introduces a bias in accounting that in turn can vary the size of the government sector upwards or downwards. The apparent size of the government sector also depends upon the accounting treatment which results in a gross or net expenditure series. The data used in this study appears as a net series since SNA states that the sum is defined by purchases less their sales (UN 1980, XIX-XXI).

The absolute size of government expenditure is a meaningless concept until it is seen in relative terms with other magnitudes such as the size of the economy. No single measure is correct, however, one measure can be more useful than another for a particular purpose (Buchanan *et al.* 1975, 41; Brown and Jackson 1978, 116; Bird 1970, 197). Peacock and Wiseman in their pioneer work on the United Kingdom raised the point of government importance to the community. For this purpose they suggested the "ratio of government expenditure on goods and services plus subsidies and transfers to gross national income at factor cost" as a suitable measure of the importance of government (Peacock and Wiseman 1967, 4-7). They pointed out that the government is a non-productive body and a non-payer of taxes on purchases. Bird (1970, 206-207) reaches the conclusion, on certain assumptions, that the best single ratio indicating the importance of government is the ratio of total government expenditure (including transfers) to gross national product at market prices. This latter ratio has been used by many researchers including Martin and Lewis (1956); Oshima (1957); Williamson (1961); Gupta (1967); Thorn (1967); Musgrave (1969) and Lotz (1970). But considering the differential productivity between the private and government sectors leading to differential price level changes it appears that the ratio at market prices is potentially misleading. In fact the divergence between constant and current price ratios has been noted by Beck (1981). The same is true in the case of Thailand (see Figure 3.1). Therefore the ratio at constant prices will be used in this study when analysing the components of government expenditure or total government expenditure.

3.2 Size and Pattern of Government Expenditure Growth in Thailand

In absolute terms, there has been a large increase in the size of government expenditure during the period 1960-1979. In 1960, government expenditure at current prices was 7133 million bhat. It rose to 102719 million bhat in 1979 (Table 3.1). This increase is more than by thirteen-fold in twenty years. As Figure 3.1 depicts the growth of government expenditure has been in a regular fashion over time. In other words the growth pattern did not reflect any shift or significant variation during the period of the present study.

Figure 3.1: Growth of Government Expenditure in Thailand



Source: Tables 3.1 and 3.3.

Table 3.1

Government Expenditure in Thailand, at Current Prices

Figures in Million Thai Bhat

Year	General Public Services	Final Consumption Expenditure 1)							Transfer 3)			
		Defence	Education	Health	Social Security	Economic Services	Other	Sub-total	Capital Expenditure	Interest on Public Debt	Transfers to Other	Subsidies and
					ty and Welfare	Services		Total				2)
1960	1610	2010	1290	210	30	150	80	5380	1008	330	415	745
1961	1730	2090	1350	220	30	170	70	5660	960	272	353	625
1962	2030	2250	1490	240	40	220	50	6320	1575	364	583	947
1963	2400	2420	1510	270	40	280	40	6960	1833	429	538	967
1964	2590	2600	1610	300	50	340	30	7520	2230	475	595	1070
1965	3060	2860	1670	310	60	370	30	8360	3029	571	608	1179
1966	3390	3190	1850	350	70	430	40	9320	3488	638	646	1284
1967	3530	3824	1997	405	74	497	33	10360	4414	875	841	1716
1968	4157	4794	2479	542	86	638	40	12736	5639	962	691	1653
1969	4439	5472	2695	571	90	747	44	14058	6093	1167	804	1971
1970	4722	6450	2989	568	98	744	49	15620	8226	1362	1162	2524
1971	5102	6904	3367	663	109	758	66	16969	8055	1868	947	2815
1972	5167	7098	3920	728	113	785	74	17885	8819	2364	1385	3749
1973	5875	8685	4722	826	122	914	95	21239	7931	2813	1128	3941
1974	7021	10126	6510	1006	144	1080	112	25999	7069	3297	1393	4690
1975	8403	11000	7820	1263	168	2180	129	30963	12129	3418	1714	5132
1976	9350	14125	9168	1587	186	2494	174	37084	12428	3562	2158	5720
1977	10710	17857	9532	1827	203	1347	200	41676	19788	4196	3046	7242
1978	12720	23420	12912	2455	278	1578	234	53597	22779	5321	2626	7947
1979	15862	29426	16284	3065	318	1707	275	66937	24709	7398	3675	11073
												102719

Sources:

- 1) Yearbook of National Account Statistics, 1970, 1976 and 1980, United Nations.
- 2) Statistical Yearbook, 1964, 1969 and 1972, United Nations, and Yearbook of National Account Statistics, 1980, United Nations.
- 3) Statistical Yearbook, 1964, 1969, 1972, 1981, United Nations, and Yearbook of National Account Statistics, 1980, United Nations.

Remark :

- a) For the years 1961, 62, 64, 66, data presented in this table are according to former SNA. Non-availability of data upto required detail did not permit to adjust them in accordance with present SNA. It is, however, expected that such adjustment would not produce marked differences in our analysis, as it revealed from simple comparison of data for the years 1960, 1963 and 1965.
- Inter-governmental transfers are excluded from item transfer to avoid double counting.
- b) Item defence includes police and justice, and all medical expenses are treated as private final consumption (SNA). Capital expenditure represents gross fixed capital formation.

As mentioned earlier, the absolute figures can give a very misleading impression regarding the size and importance of the government sector, since there have also been changes in the magnitude of other items in the economy. In particular, prices, population and per capita income are all regarded to influence government expenditure. Therefore, it is desirable, first of all, to see how the pattern of growth and the magnitude of government expenditure have been affected by these factors.

3.2.1 Price Changes and Government Expenditure

There are few countries which did not experience a significant rise in the general price level during the 1960s and 1970s. In Thailand the price level rise took on momentum in the 1970s, especially after 1972 (Table 3.2). For the whole period, 1960-1979, the annual average rate of increase in the consumer's price index (CPI) for Thailand was 4.7 per cent and for the 1970s only it was 8.5 per cent. In the face of rising price levels, it is true that more money expenditures would be needed even to provide the same quantum of goods and services. Therefore, it is quite possible that real expenditure will remain constant or even fall while money expenditure is rising.

When the total government expenditure in money terms was deflated⁶ in account for the almost trebled price levels the increase in money expenditure of 1,340 per cent from 1960 to 1979 declined to 524 per cent (calculated using Table 3.3). Provided that the deflation procedure is acceptable, the deflated figures are an indication of the change in real terms. If so, the increase of 524 per cent in twenty years is a substantial one.

As Figure 3.1 shows the removal of price on government expenditure does not alter the growth pattern significantly. However, a short disturbance caused a fall in the absolute size of real expenditure. This fall occurred during the high inflation period of 1973-1974 (see Table 3.2). If looked at closely, this fall came mainly from the sharp decline in capital expenditure as shown in Figure 3.2. It is learnt from Thai official reports that the fall in capital expenditure even at current prices (Table 3.1) was due to the deliberate action of the Thai Government, in an attempt to manage its budgetary position in the face of high inflation. As the Bank of Thailand (1973, 25-31 and 1974, 34) reported, to keep expenditures within the ceiling allowed by the law and the economic situation, the Thai Government had to cut its expenditure on capital formation, as the provision of current consumption comprising necessary items could not be reduced. Consequently, many construction projects and planned purchases of equipment were suspended. The period of inflation experienced by Thailand was certainly out of its control and, moreover, was unprecedented.

Table 3.2

Price Indexes and Deflators for Thailand, 1960-1979
(1975=100)

Year	1)	1)	Implicit Price Deflator Index of 2)					
	Consumers' Price Index	Wholesale Price Index	Gross Domestic Product	Agricultural Product	Manufacturing Product	Government Final Consumption	Private Final Consumption	Gross Fixed Capital Formation
1960	52.20	-	53.30	49.60	54.40	58.10	53.00	52.50
1961	55.90	-	55.30	51.80	56.80	58.80	54.50	54.30
1962	57.30	-	55.40	49.40	58.90	60.00	56.40	55.40
1963	57.80	-	54.50	47.00	58.00	60.50	56.30	55.70
1964	59.00	-	56.10	47.30	57.70	61.60	56.80	54.60
1965	59.10	-	58.70	57.30	57.10	62.20	58.00	55.30
1966	61.50	-	63.00	59.40	59.40	64.20	60.70	57.60
1967	64.10	-	62.30	57.20	63.40	66.50	63.50	57.40
1968	65.30	-	62.00	55.10	63.40	67.50	64.00	58.10
1969	66.80	56.50	63.20	56.50	63.00	68.50	64.60	57.90
1970	66.70	56.30	62.80	52.60	63.90	69.40	64.40	61.30
1971	67.10	56.40	61.80	53.30	67.60	69.00	64.80	60.80
1972	69.70	60.90	67.40	66.00	68.30	71.40	67.50	64.30
1973	77.80	74.80	80.50	85.90	77.20	77.10	78.30	78.20
1974	96.00	96.50	96.30	98.20	98.10	94.70	96.40	97.80
1975	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
1976	104.90	104.00	104.80	104.80	101.30	104.80	104.10	104.20
1977	113.70	112.10	113.80	111.70	106.20	108.10	111.30	105.80
1978	123.70	120.40	123.60	117.50	115.90	119.20	121.90	116.60
1979	136.40	133.90	137.90	135.90	129.70	128.50	134.90	133.80

Sources :

- 1) For CPI Monthly Bulletin, Vol. 14(1972), Vol. 20(1980) and Annual Economic Report 1964 and 1965, Bank of Thailand and for WPI Monthly Bulletin Vol. 18(1978) and vol. 21(1981), Bank of Thailand.
- 2) Yearbook of National Account Statistics, 1980, United Nations.

Remark : CPI and WPI indexes from above sources have been adjusted arithmatically for 1975=100. For the years before 1969 WPI representing whole country is not available.

Table 3.3

Government Expenditure in Thailand, at 1975 Prices

Figures in Million Bhat

Year	Current expenditure											Total		
	Final Consumption						Transfer							
	General Public	Service	Defence	Edu- cation	Health	Social Welfare	Securi- ty and Welfare	Eco- nomic Service	Other	Sub- Total	Inter- est on Public Debt	Subsi- dies and tr- ansfers	Sub- Total	Capital
1960	2771	3460	2220	361	52	258	138	9260	619	795	1414	1920	12594	
1961	2942	3554	2296	374	51	289	119	9626	492	631	1123	1768	12517	
1962	3383	3750	2483	400	67	367	83	10533	657	1017	1674	2843	15051	
1963	3967	4000	2496	446	66	463	66	11504	787	931	1718	3291	16513	
1964	4205	4221	2614	487	81	552	49	12208	847	1008	1855	4084	18147	
1965	4920	4598	2685	498	96	595	48	13441	973	1029	2002	5477	20919	
1966	5280	4969	2882	545	109	670	62	14517	1013	1050	2063	6056	22636	
1967	5308	5750	3003	609	111	747	50	15579	1404	1312	2717	7690	25985	
1968	6159	7102	3673	803	127	945	59	18868	1552	1058	2610	9706	31184	
1969	6480	7988	3934	834	131	1091	64	20523	1847	1204	3050	10523	34096	
1970	6804	9294	4307	818	141	1072	71	22507	2169	1742	3911	13419	39837	
1971	7394	10006	4880	961	158	1099	96	24593	3023	1411	4434	13248	42275	
1972	7237	9941	5490	1020	158	1099	104	25049	3507	1987	5495	13715	44259	
1973	7620	11265	6125	1071	158	1185	123	27547	3494	1450	4944	10142	42634	
1974	7414	10693	6874	1062	152	1140	118	27454	3424	1451	4875	7228	39557	
1975	8403	11000	7820	1263	168	2180	129	30963	3418	1714	5132	12129	48224	
1976	8922	13478	8748	1514	177	2380	166	35385	3399	2057	5456	11927	52769	
1977	9907	16519	8818	1690	188	1246	185	38553	3687	2679	6366	18703	63623	
1978	10671	19648	10832	2060	233	1324	196	44964	4305	2123	6428	19536	70928	
1979	12344	22900	12672	2385	247	1328	214	52091	5365	2694	8059	18467	78617	

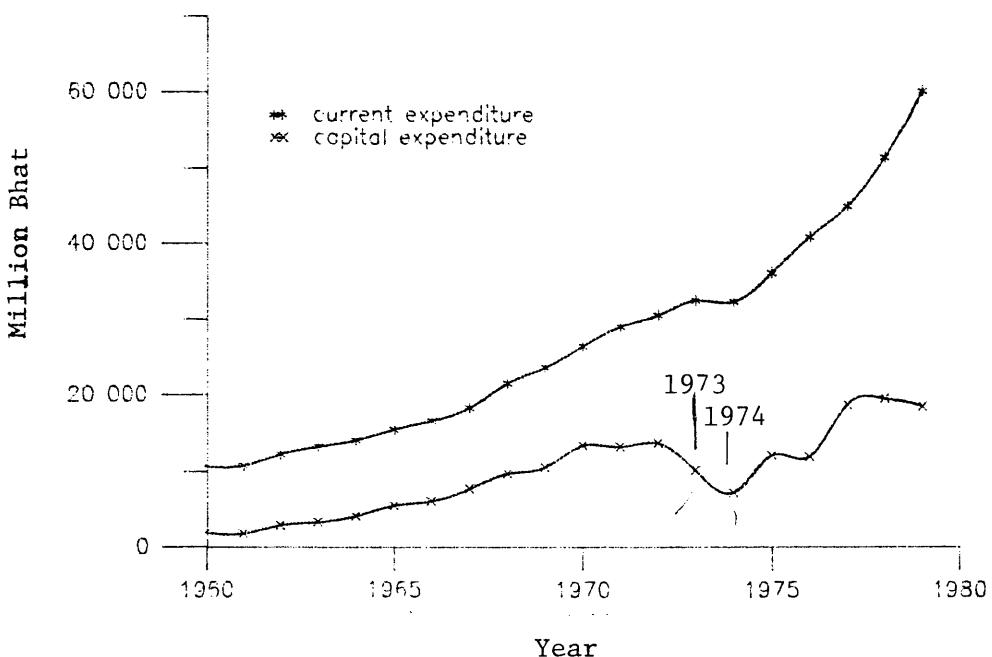
Sources : Calculated using Tables 3.1 and 3.2.

Remark : Since different deflators for various items of consumption expenditure were not available all items have been deflated by the deflator for government final consumption expenditure. For the same reason capital expenditure has been deflated by the deflator for the nation's gross fixed capital formation.

Interest on public debt has been deflated by GDP deflator since main liability of government stands against financial institutions. For subsidies and transfers CPI has been used because transfer to households constitutes major part.

Rows may not exactly add to sub-totals and total due to rounding errors.

Figure 3.2: The Government's Current and Capital Expenditure at 1975 Prices



Source: Table 3.3.

Considering the above with regard to the government revenue constraint it appeared that the above-mentioned disturbance on the time pattern of the growth of government expenditure would have occurred in any case, but not mainly through the fall in capital expenditure.

3.2.2 Population Change and Government Expenditure

The data presented in Table 3.4 shows that the period of this study was marked by considerable changes in the rate of growth of the population. It is very hard to believe that significant upward and downward movements in the growth rate of the population can occur in a short time period. However, the average annual rate of growth of the population for the period turned out to be 3.2 per cent which appears reasonable when compared with other publications. In absolute terms, the population of 1979 is 79 per cent higher than in 1960.

The growth in population does have various effects on the need for public goods such as roads, housing, sewerage and water supply (Prest 1972, 14). As Musgrave (1969, 14) argues, an increase in population size will

Table 3.4

Population Data and Per Capita Government Expenditure

Year	1)		Urban Population (million)	2)		Government Expenditure at 1975 Prices 3)	
	Total Population (million)	Population Increase (%)		Population (million)	Amount (bhat)	Index	
1960	25.76	-	3.20		489		100.00
1961	26.48	2.80	3.30		473		96.73
1962	27.32	3.17	3.40		551		112.68
1963	28.45	4.14	3.60		580		118.61
1964	29.56	3.90	3.70		614		125.56
1965	30.57	3.42	3.90		684		139.88
1966	31.48	2.98	4.00		719		147.03
1967	32.47	3.14	4.20		800		163.60
1968	33.55	3.33	4.30		929		189.98
1969	34.52	2.89	4.50		988		202.04
1970	35.55	2.98	4.70		1121		229.24
1971	36.82	3.57	5.00		1148		234.76
1972	38.36	4.18	5.20		1154		235.99
1973	39.95	4.14	5.50		1067		218.20
1974	41.33	3.45	5.80		957		195.71
1975	42.39	2.56	6.10		1138		232.72
1976	43.21	1.93	6.40		1221		249.69
1977	44.27	2.45	6.80		1437		293.87
1978	45.22	2.15	7.20		1569		320.86
1979	46.11	1.97	7.60		1705		348.67

Sources :

- 1) Statistical Summary of Thailand, 1977 and 1982, National Statistical Office, Office of the Prime Minister.
- 2) Calculated using Tables 6 & 13 in Migration, Urbanization and Development in Thailand, 1982, United Nations.
- 3) Calculated using Table 3.3.

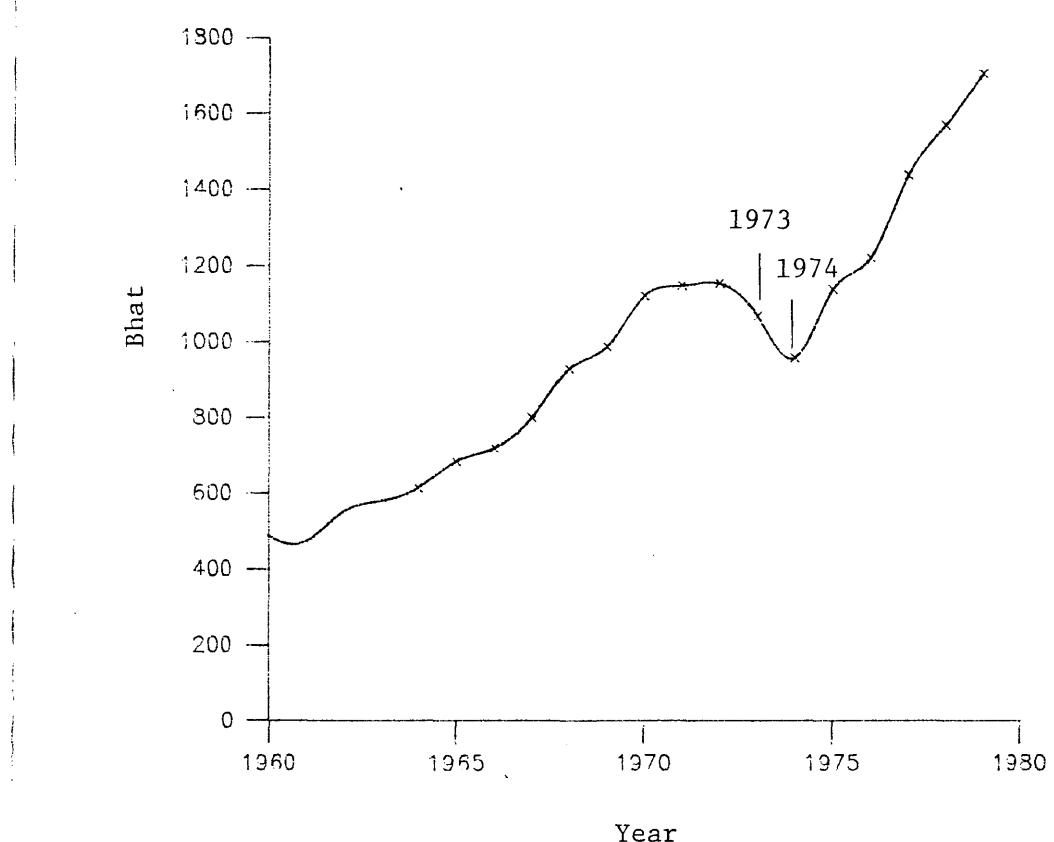
demand an expansion of public services and hence higher level of public expenditure at a given level of income. The argument is based on the fact that many of the goods and services provided by the government are not pure public goods since they are not available for the joint consumption of the entire society.

When the effect of population increase is removed, the increase in government expenditure at 1975 prices between 1960 and 1979 declines from 524

per cent to 249 per cent. That is, government expenditure per head of population rose by 249 per cent between 1960 and 1979. In absolute terms, per capita government expenditure rose from 489 bhat in 1960 to 1,705 bhat in 1979 (Table 3.4). The increase in per capita government expenditure of this magnitude in twenty years is again very substantial for any country.

The pattern of expenditure growth remains unchanged after the effect of population change is removed (Figure 3.3). That is to say there is nothing different, except in magnitude, in the time pattern of expenditure growth from that obtained when price increases are excluded.

Figure 3.3· Per Capita Government Expenditure in Thailand, at 1975 Prices



Source: Table 3.4.

3.2.3 Income Change and Government Expenditure

As Table 3.5 shows the level and per capita GNP increased considerably in Thailand during the period 1960-1979. At constant prices of 1975, GNP grew at an annual average rate of 7.3 per cent. In per capita terms it grew at the average rate of 4.1 per cent per annum.

Table 3.5

Levels of Product and Income of Thailand

Million Bhat

Year	at Current Prices			at 1975 Prices 3)			
	Gross 1) Domestic Product (GDP)	Gross 2) National Product (GNP)	1) National Income (NI)	GDP	GNP	NI	GNP Per Capita
							NI Per Capita
1960	53984	55090	52257	101283	103358	98043	4012
1961	57190	58087	56950	103418	105040	102984	3967
1962	63420	63030	61330	114477	113773	110704	4164
1963	68079	68921	65165	124916	126461	119569	4445
1964	74930	73730	71040	133565	131426	126631	4446
1965	84303	81274	80046	143617	138457	136365	4529
1966	99500	96803	96180	157937	153656	152667	4881
1967	108294	108462	102149	173827	174096	163963	5362
1968	116774	117046	109503	188345	188784	176618	5627
1969	128566	128792	119912	203427	203785	189734	5903
1970	136060	136439	126155	216656	217260	200884	6111
1971	144607	144637	133079	233992	234040	215338	6356
1972	164626	164299	151465	244252	243767	224726	6355
1973	216543	216119	201348	268998	268471	250122	6720
1974	271368	272166	254372	281794	282623	264145	6838
1975	297212	298597	275979	297212	298597	275979	7044
1976	337635	336374	312333	322171	320968	298028	7428
1977	393030	391016	362407	345369	343599	318460	7761
1978	469952	464550	430122	380220	375850	347995	8312
1979	556240	546449	504562	403365	396265	365890	8594
							7935

Sources :

- 1) Yearbook of National Account Statistics, 1970, 1976 and 1980, United Nations.
- 2) For the years 1960-1969 Monthly Bulletin(various issues), Bank of Thailand and for the years 1970-1979 Key Indicators of DMCs, 1983, Asian Development Bank.
- 3) Calculated using Tables 3.2 and 3.4.

While ignoring, at the moment, all other possible effects of the changes in the level of income, the only point we want to make here is that the increase in per capita income affects the government expenditure in all departments by making it necessary to pay the rising wages resulting from the productivity rise in the economy as a whole.

When the effect of the increase in per capita income is removed from the per capita government expenditure series, both at 1975 prices, it still appeared that the total government expenditure as a ratio⁷ of GNP was rising. That is, the ratio rose from 0.122 in 1960 to almost 0.20 in 1979 (Table 3.6). This, clearly, is the result of faster rate of growth of government expenditure (9.4%/year) or of its per capita (6.2%/year) compared to that of GNP or of GNP per capita, respectively. The indexes in Table 3.4 and 3.7 present the exact magnitude of the increase in government expenditure and GNP. At constant prices of 1975, the indexes of total and per capita government expenditure rose from 100 and 100 in 1960 to 316 and 229 in 1970, and to 624 and 348 in 1979, respectively. Correspondingly the indexes of GNP and its per capita were 100 and 100, 210 and 152, and 383 and 214 in the years 1960, 1970 and 1979, respectively.

Table 3.6

Ratio of Government Expenditure in GNP

Year	at 1975 Prices	at current Prices
1960	0.1218	0.1295
1961	0.1192	0.1247
1962	0.1323	0.1403
1963	0.1306	0.1416
1964	0.1381	0.1468
1965	0.1511	0.1546
1966	0.1473	0.1456
1967	0.1493	0.1520
1968	0.1652	0.1711
1969	0.1673	0.1718
1970	0.1834	0.1933
1971	0.1806	0.1925
1972	0.1816	0.1854
1973	0.1588	0.1532
1974	0.1400	0.1387
1975	0.1615	0.1615
1976	0.1644	0.1642
1977	0.1852	0.1757
1978	0.1887	0.1815
1979	0.1984	0.1880

Table 3.7

GNP and Government Expenditure, at 1975 Prices

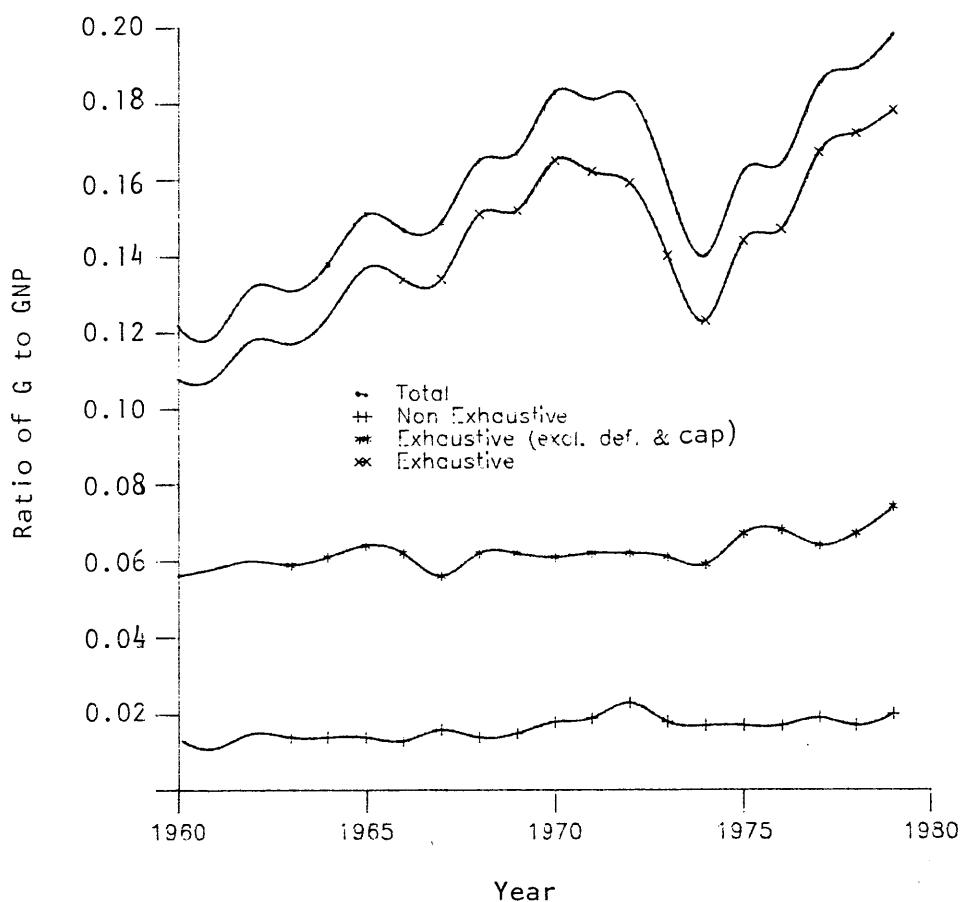
Year			Per cent	Per cent	Indexes(1960=100) of		
	Per cent	in Per Capita GNP	Change	in Govt. Expen-	Per Capita GNP	Govt. Expen-	diture
	Change in GNP	GNP	diture	GNP	GNP	diture	
1960	-	-	-	100.00	100.00	100.00	
1961	1.63	-1.14	-0.61	101.63	98.87	99.39	
1962	8.31	4.98	20.24	110.08	103.80	119.51	
1963	11.15	6.74	9.71	122.35	110.79	131.12	
1964	3.93	0.02	9.90	127.16	110.82	144.09	
1965	5.35	1.87	15.28	133.96	112.89	166.11	
1966	10.98	7.77	8.20	148.66	121.66	179.73	
1967	13.30	9.85	14.80	168.44	133.64	206.33	
1968	8.44	4.95	20.00	182.65	140.25	247.61	
1969	7.95	4.91	9.34	197.16	147.14	270.73	
1970	6.61	3.52	16.84	210.20	152.33	316.32	
1971	7.72	4.01	6.12	226.44	158.43	335.68	
1972	4.16	-0.03	4.69	235.85	158.39	351.43	
1973	10.13	5.75	-3.67	259.75	167.50	338.52	
1974	5.27	1.76	-7.22	273.44	170.44	314.09	
1975	5.65	3.01	21.91	288.90	175.57	382.91	
1976	7.49	5.45	9.42	310.54	185.15	419.00	
1977	7.05	4.49	20.57	332.44	193.46	505.18	
1978	9.39	7.09	11.48	363.64	207.17	563.19	
1979	5.43	3.40	10.84	383.39	214.20	624.24	

Sources : Calculated using Tables 3.3 and 3.5.

Again the removal of the income effect does not alter the time pattern of government expenditure growth (Figure 3.4) in a manner that requires additional explanation.

Now, the problem is that we are left with a phenomenon of rising government expenditure even after removing the effects of the three influences discussed above. Before making an attempt to explain such a phenomenon the following section examines the empirical relationship between government expenditure and revenue.

Figure 3.4: Shares of Various Expenditures in GNP, at 1975 Prices



Source: Table 3.9.

3.3 Relationship Between Expenditure and Revenue

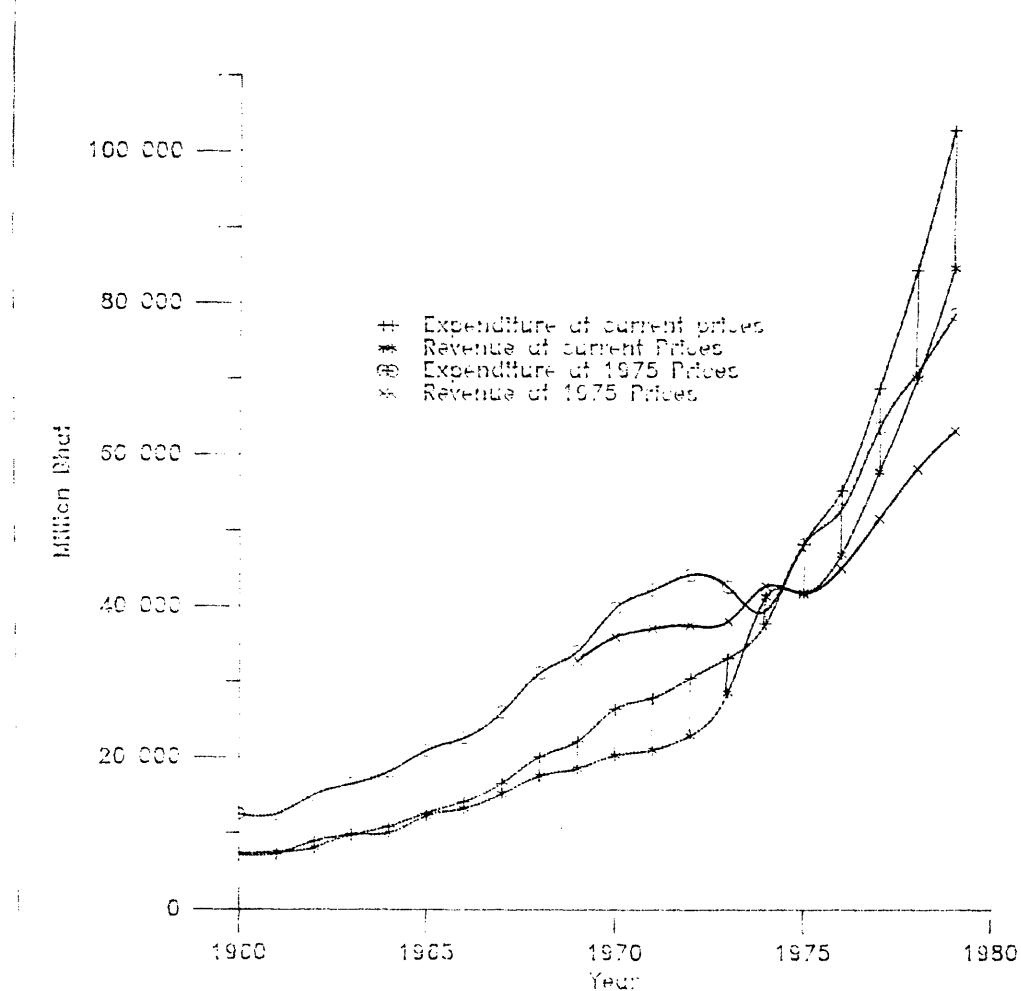
There are many empirical studies which have attempted to explain the relative size or share of government from the revenue side using per capita income and/or degree of openness, tax structure, and political and social factors as explanatory variables. These studies include Oshima (1957), Williamson (1961), Hinrichs (1966), Lotz and Morss (1967), Chelliah (1971) and Cameron (1978). The explanations which are offered to explain the revenue

share of government in GNP (or in similar aggregate) do not say anything about the formation of or changes in government services provided. Therefore, the explanations of changing revenue share are unsatisfactory in understanding the growth and development of government expenditure share. And it is so unless one is prepared to accept and is able to prove the contention, seldom mentioned in literature, that the rise in revenue is the main cause of expenditure growth. For this reason this study has elected to avoid the discussion of theories or explanations of the changing share of government revenue. However, the crucial role that the availability of revenue can play in limiting the expansion of government activity in certain circumstances is undeniable.

As mentioned, for the period 1960-1979 government expenditure in Thailand in money terms grew at an annual average rate of 13.7 per cent while government's nominal revenue⁸ grew at a slower average rate of 12.8 per cent per annum. The same relationship exists when the two aggregates are compared at 1975 prices. That is, the average annual rate of growth of government expenditure and revenue were 7.4 per cent and 6.0 per cent, respectively.⁹ Figures of this sort clearly indicate the widening gap between the levels of expenditure and revenue. Figure 3.5 shows the persistent divergence between the levels of government expenditure and revenue. To have some view of the magnitude of the gap, the shares of government expenditure and revenue in GNP were compared. The share of government money expenditure at current prices GNP reached 18.80 per cent in 1979 from 12.95 per cent in 1960 whereas the share of nominal revenue in GNP could reach only to 15.49 per cent in 1979 from 13.22 per cent in 1960 (Tables 3.6 and 3.8). In other words, the difference between the shares of expenditure and revenue in GNP increased between 1960 and 1979. The same is true when constant prices values are compared. Further, the simple comparison of the estimated income-elasticities¹⁰ of expenditure and revenue, again, indicate the divergence between them. The estimated income-elasticity of the overall revenue system for the period 1960-1979 is 1.06 which is smaller than the estimated income-elasticity of the value of 1.14 of total expenditure.¹¹

The displacement effect hypothesis suggests that such divergences may be narrowed by large-scale social upheavals which could alter the assumed socio-cultural limits on taxation (Peacock and Wiseman 1967, XXXIV). At first sight it may appear a reasonable explanation of the above situation but a closer look at the data for Thailand tends to suggest that such a crisis is not necessary to allow for the expansion of government activity. That is, the consideration upon the tax structure along with its base gives hope for the possibility of substantial increases in future revenue collection without any major upheaval.

Figure 3.5: Comparison of Government Expenditure and Revenue



Source: Table 3.8.

During the period 1960-1975, more than 75 per cent of total government nominal revenue was contributed through the indirect tax system (Table 3.8). This is a large share and does not appear likely to diminish as a proportion of GNP. It is not highly vulnerable to external shocks since the foreign trade tax, in total, accounted for about 30 per cent and export duties alone accounted for about only 4 per cent in total indirect tax revenue in the year 1979.¹² Secondly, the estimated income elasticity of the indirect tax system, which was of the order of 1.01 for the period 1960-1979, seems likely to appreciate. This is because the share of business and sales taxes combined accounted for more than 55 per cent of total indirect tax revenue in the year 1979.¹³ Now, it can be seen from Table 4.6 that the manufacturing sector, which is the main base of the major component of indirect tax system is growing faster than GDP. In addition, the faster growth of the manufacturing

Table 3.8

Structure of Government Revenue in Thailand

Figures in Million Bhat

Year (1)	Indirect Taxes (2)	Direct Taxes (3)	Other Revenues (4)	Total Revenue		2 in 5 (7)	3 in 5 (8)	Percentage of		
				Current Prices (5)	Constant Prices (6)			6 in GNP at 1975 Prices (9)	5 in GNP at Current Prices (10)	
1960	5620	582	1082	7284	-	77.16	7.99	-	-	13.22
1961	6205	662	582	7449	-	83.30	8.89	-	-	12.82
1962	6717	728	557	8002	-	83.94	9.10	-	-	12.70
1963	7649	890	1145	9684	-	78.99	9.19	-	-	14.05
1964	8403	894	660	9957	-	84.39	8.98	-	-	13.50
1965	9725	1224	1237	12186	-	79.80	10.04	-	-	14.99
1966	11132	1388	682	13202	-	84.32	10.51	-	-	13.64
1967	12555	1598	970	15123	-	83.02	10.57	-	-	13.94
1968	14158	1862	1490	17510	-	80.86	10.63	-	-	14.96
1969	15408	2144	960	18512	32765	83.23	11.58	16.08	-	14.37
1970	15765	2319	2165	20249	35966	77.86	11.45	16.55	-	14.84
1971	16210	2578	2174	20962	37167	77.33	12.30	15.88	-	14.49
1972	17780	2721	2396	22897	37598	77.65	11.88	15.42	-	13.94
1973	22726	3453	2332	28511	38116	79.71	12.11	14.20	-	13.19
1974	32444	5066	3802	41312	42810	78.53	12.26	15.15	-	15.18
1975	31412	6581	3827	41820	41820	75.11	15.74	14.01	-	14.01
1976	35563	7092	4226	46881	45078	75.86	15.13	14.04	-	13.94
1977	44767	8808	4227	57802	51563	77.45	15.24	15.01	-	14.78
1978	52725	12112	5160	69997	58137	75.32	17.30	15.47	-	15.07
1979	64262	14445	5917	84624	63199	75.94	17.07	15.95	-	15.49

Sources : Yearbook of National Account Statistics, 1970, 1976 and 1980, United Nations. For the years 1961, 1962 and 1964, Monthly Bulletin, Bank of Thailand. Figures in the last two columns of the Table were calculated using Table 3.5.

Remark : Revenue figures were deflated by wholesale price index presented in Table 3.2.

sector leads to an expanded market economy and hence economic exchange. This follows the division of labour and transformation of many activities from households to market sector leading to the further expansion of the volume of economic exchange (Tarschys 1975, 23). The larger the scale of economic exchange at a given level of income, the greater is the taxable capacity of the government.

On the other hand, the estimated income-elasticity of direct tax system for the period 1960-1979 is 1.47 which is already greater than that of expenditure. As one would expect, the share of direct taxes in total revenue (Table 3.8) and in GNP has increased, and will continue to increase since the level of per capita income is rising. On top of this, there is the possibility of a persistent rise in tax rates. From the point of view of taxpayers, as subsistence needs are satisfied they are more likely to be willing to contribute with their surplus resources for the cause of collective needs.

In the above circumstances it may not be very difficult to raise higher levels of revenue to finance an increasing demand for public goods and services and to sustain higher level of expenditure, even after the revenue yield of foreign trade tax declines.

Now the question is whether there is a limit to taxation. Colin Clark (1945) considered 25 per cent of net national income in taxation as a critical limit. Later following the evolution in accounting system, he established 23 per cent of GNP at factor cost as a critical limit (Clark 1977). According to him, any attempts to go beyond the critical limit would lead to the collapse of the economy as a result of inflation, lost incentives for work etc. The experience of many countries has disproved the danger point of 25 per cent.¹⁴ Milton Friedman (1976) wrote an article titled "The line we dare not cross: the fragility of democracy at '60%'" based on the economic history of Chile.

Referring to the experience of other countries, it can be assumed that Thailand has still a long way to go to reach the point of limit to taxation, if there is any. On the other hand, as argued above, there is high potential taxable capacity. Considering these aspects of the potential for higher tax revenues, it can, perhaps, be said that there does not yet appear a long run barrier from revenue side for the expansion of government activity in Thailand.

3.4 Rising Share of Government Expenditure in GNP

Some of the major explanations discussed in Chapter 2 appeared irrelevant in the context of Thailand for the period under consideration.

Therefore, they will be mentioned first.

Although, it was observed that the pattern of government expenditure growth was disturbed in some years in the 1970s, data on Thailand in general did not reflect the situation which could be explained by the displacement effect hypothesis. For clarity it is preferred to restate here the point with which we are concerned. The displacement effect hypothesis states that:

... after the disturbance is over ... public expenditure again taking a constant share of GNP (Peacock and Wiseman 1967, XXXIV).

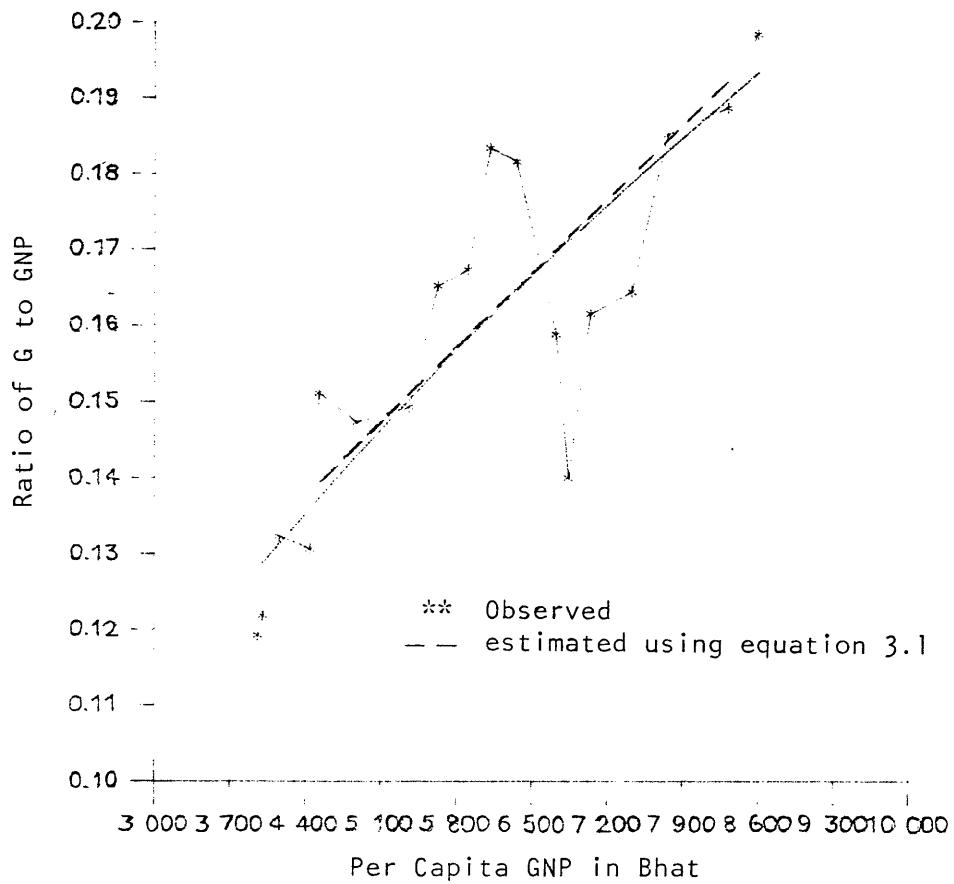
The irrelevance of the case of Thailand with the displacement effect hypothesis is clearly depicted by Figure 3.4.

The political environment of Thailand appeared unsuitable to examine the relevancy of various political hypothesis mentioned in Chapter 2. Since 1932 Thailand has been ruled, except for brief intermittent period, by military dictators. There were two democratically elected governments for the total period of about two years, March 1975-April 1976 (Kurian 1982, 1735-89). During the period of democratic regime there did not appear to be any significant alteration in the share of government expenditure (Figure 3.4). The hypothesis forwarded by de Tocqueville (1835 [1965]), Rokkan (1970) and the expectation of Martin and Lewis (1956) suggest that share of government expenditure in GNP would have increased when democratic government took over from military dictators. The period of democratic regime was politically unsettled and economically difficult. Moreover, given the practice of planned development in Thailand, the period of democratic government was too short to reflect their choice of policies in government's programmes. In fact, two democratic governments of Thailand ruled the country in the middle period of the Third Five Year Development Plan. In these circumstances, neither can we reject the hypothesis that the size of government is positively related to the extension of franchise nor can we say that there is no difference in the type of political institution as far as government expenditure is concerned. Now, we will turn to examine, firstly, the validity of Wagner's law with reference to Thailand.

The interpretation of Wagner's law is that the relative importance of the share of public sector in GNP will grow as per capita income rises (or with the level of economic development).

Figure 3.6 shows the ratio of government expenditure to GNP and the level of per capita GNP. The observed ratios, for the period 1960-1979, are plotted against per capita GNP on a scatter diagram. The smooth curve

Figure 3.6: Ratio of Government Expenditure to GNP
at 1975 Prices



sloping upwards toward the right represents the estimated functional relationship of the share of government expenditure in GNP with the level of per capita GNP. The following is the generalised least square estimate with standard errors of parameters in parenthesis, for the period 1960-1979.

$$\log (G/y)_t^* = -6.480 \log C_t^* + 0.534 \log Y_{pt}^* \quad (3.1)$$

(1.018) (0.117)

$$R^2 = 0.803; \bar{R}^2 = 0.792; d = 1.82; \sigma = 0.0047$$

where,

G/y = the ratio of government expenditure to GNP, at constant prices of 1975.

C = constant, and

Y_p = per capita GNP, at 1975 prices.

As expected, the estimated ratio-income elasticity is positive. The values of unadjusted and adjusted coefficient of determination (R^2 and \bar{R}^2) are 0.803 and 0.792 respectively. Durbin-Watson statistics of the value 1.82 indicates that there is no auto-correlation at 5 per cent level of significance. The value of estimated ratio-income elasticity is 0.534 which is equivalent to say that the elasticity of per capita government expenditure with respect to the change in per capita GNP is 1.534.¹⁵

The hypothesis that the share of government expenditure in GNP increases with the level of economic development is accepted at 5 per cent significance point. That is, the ratio-income elasticity is significantly greater than zero or the income elasticity is significantly greater than unity. Looking at the nature of the relationship between the share of government expenditure in GNP and the level of per capita GNP presented in Figure 3.6 and the statistical acceptance of the hypothesis, mentioned above, the evidence of Thailand seems, broadly, to support the Wagner's law of expanding scale of state activity. The use of the term "broadly" in the preceding sentence is because of the doubt cast by Figure 3.6 about the long-run validity of Wagner's law. Figure 3.6 indicates the share of government expenditure in GNP was increasing but at the decreasing rate in later years. To confirm this the sample size was broken in two periods, 1960-1969 and 1970-1979 and equation 3.1 was re-estimated.

$$1960-1969: \log (\frac{G}{y})_t^* = -8.520 \log C_t^* + 0.776 \log Y_{pt}^* \quad (3.2)$$
$$\qquad \qquad \qquad (0.894) \qquad \qquad (0.106)$$
$$R^2 = 0.866; \bar{R}^2 = 0.851; d = 1.96; \sigma^2 = 0.0021$$

$$1970-1979: \log (\frac{G}{y})_t^* = -4.174 \log C_t^* + 0.275 \log Y_{pt}^* \quad (3.3)$$
$$R^2 = 0.389; \bar{R}^2 = 0.313; d = 1.58; \sigma^2 = 0.0075$$

The estimated ratio-income elasticity for the period 1960-1969 is 0.776 and significant at 5 per cent significance point, and the estimated ratio-income elasticity for the period 1970-1979 is only 0.275 and insignificant at 5 per cent significance point. An attempt, to improve the estimate for the period 1970-1979 by dropping two observations of 1974 and 1975 for specific reasons mentioned in Section 3.2.1, did, neither, increase the value of ratio-income elasticity nor make significant. Overall, the indication is that the value of ratio-income elasticity has fallen in later period. On this basis one can anticipate, in line with Musgrave (1969), that the share of government expenditure in GNP may cease to rise at some stage or may even fall while the economy as a whole is expanding.

Let us now turn to the productivity lag hypothesis. As does the Wagner's law, the productivity lag hypothesis predicts that the share of government sector in GNP will rise with the level of economic development. In this sense they are not different from each other, and therefore what has been said in the above two paragraphs is also true for the productivity lag hypothesis. The fundamental difference between the Wagner's law and the productivity lag hypothesis, as it is known from Chapter 2, lies on the different causes they provide. In contrast to the argument of the modern version of Wagner's law that government goods and services are income-elastic in nature, the productivity lag hypothesis regards the increasing relative cost of government goods and services resulting from the slower productivity rise as a cause of the rising share of government sector in GNP if the initial ratio of government output is to be maintained. The latter ignores the relative price effect on the demand for government goods and services. The rising relative prices of government goods and services as a direct consequence of increased cost of production tends to decrease the demand for them, unless they are price inelastic. Therefore, if the productivity of private and public sector grow at different rate the share of government expenditure in GNP will depend both on relative price and income elasticities.

There does not exist data on total government output so as to allow one to compute the productivity of government sector. Pluta (1981) constructs a proxy, to compare the relative productivity of the economy as a whole with the government sector, based on the ratio of the deflator of gross domestic product to the deflator of government expenditure. If the prices of government goods and services are determined by market forces then such a ratio can be indicative of the relative productivity. The evidence of Thailand based on the ratio of price deflators does not support the proposition of productivity lag in government sector. Instead, the evidence indicates the case of productivity lag in the private sector. It can be seen from Table 3.2 that the ratio of the implicit price deflator of government final consumption to the deflator of private final consumption is falling over time. Which indicates the prices of private consumption items increased faster than the prices of government consumption items. When the ratios of the implicit price deflator for total government expenditure¹⁶ to the implicit price deflator of gross domestic product (Table 3.2) were computed, again the indication was that the productivity of government sector was growing faster than the productivity of the economy as a whole. This leads to an impression that the rising share of Thai government expenditure in GNP was not due to the rising cost of government

goods and services but may be due to the falling relative prices of government goods and services. The detailed examination of the productivity case is postponed to Chapter 4.

Now, let us turn, again, to the estimated result of the regression equation (3.1). The value of R^2 of the equation (3.1) tells us that 80 per cent of the total variation in the ratio of government expenditure to GNP of the period 1960-1979 is explained by the levels of per capita GNP. The inference one makes from such estimation is that the ratio in question is largely explained by independent variable. As cited in Chapter 2 there are other factors namely demographic, social, administrative, technological, ideological and perhaps more which are also expected to influence the share of government sector. But these factors appear to have had minimal effects compared to per capita GNP. The explanation offered by regression approach points only to statistical association, that is, mainly reflecting the common trends between the ratio of government expenditure to GNP and per capita GNP. Therefore, we cannot as yet be sure that other factors had not had significant influence on the share of government expenditure in GNP.

Moreover the ratio about which we are talking so far is potentially misleading at least as far as one attempts to attach significance of government activity in community's activity. The numerator of the ratio includes transfer payments which are excluded from the denominator. Thus, conceptually, the ratio is not limited to unity. Values above unity are possible, though unlikely. But from this consideration transfers cannot simply be excluded from government expenditure because both exhaustive and non exhaustive expenditures require budget financing which in turn affects resource allocation in one way or another (Peacock and Wiseman 1967, 20; Bird 1970, 20). From the point of view of the influence of government on community the omission of transfers can make the ratio without any significance.

If the rising ratio of government expenditure to GNP is interpreted as positive income elasticity of greater than unity, it may not be always true. For instance, the ratio will rise if the absolute size of government expenditure remains constant but the size of GNP falls.

The above ratio also does not tell us what has happened to the importance of government as consumer, as producer, as investor, as employer, and as redistributor for society as a whole. For this we need to look at some disaggregation of the ratio. When the items consumption, transfers and capital presented in Table 3.3 were compared in relation to GNP figures the indication was that the importance of government in Thailand as consumer, as redistributor

and as investor has increased. As it will be mentioned in the next chapter the importance of government as employer has also increased. As it was mentioned in Chapter 1, the total government expenditure is not a sum of expenditures on homogeneous goods and services. Therefore the ratio also does not tell anything about what has happened to the influence of various expenditure items in the community. A better understanding of the growth pattern of government expenditure requires an examination of the determinants of various types of expenditures.

3.5 Expenditures by Economic Categories

3.5.1 Exhaustive and Non-exhaustive Expenditures

In the case of exhaustive government expenditure the role of the market determining both scale and composition of output is largely supplanted by government through political decisions and bureaucratic actions. In the case of non-exhaustive expenditure the final output depends on consumers' choice (Heald 1983, 12).

The relevant measure of exhaustive expenditure is the goods and services used up or consumed and invested by government in the course of its own activities. Exhaustive expenditure has been the major component of government expenditure in Thailand. As Table 3.9 and Figure 3.4 show the share of constant prices exhaustive expenditure in GNP has increased from 11 per cent in 1960 to 18 per cent in 1979. In terms of the percentage of total government expenditure the exhaustive expenditure increased slightly over time from about 89 per cent both at current and constant prices. The current civilian expenditure on goods and services, that is exhaustive expenditure minus defence and capital items, as a percentage of GNP has risen from 5.6 to only 7.4 between 1960 and 1979. It can be seen from Table 3.3 that the item defence has been the major part of government expenditure on goods and services.

Government spending on non-exhaustive category includes transfers and subsidies but excludes expenditure on goods and services provided for social security and welfare. This category of expenditure has not grown as fast as it might be expected from the experience of western countries. The share of non-exhaustive expenditure rose from 1.4 per cent of GNP in 1960 to only 2 per cent of GNP in 1979 (Table 3.9). In terms of the percentage of total government expenditure it fell slightly from about 11 per cent.

3.5.2 Current and Capital Expenditures

Traditionally, government expenditures are divided in two broad categories representing two different economic characters. They are current

Table 3.9

Ratios of Various Expenditures in GNP, at 1975 Prices

Year	Total Expenditure	Exhaustive		
		Non- Exhaustive	Excluding Defence and Capital	All
1960	0.122	0.014	0.056	0.108
1961	0.119	0.011	0.058	0.108
1962	0.132	0.015	0.060	0.118
1963	0.131	0.014	0.059	0.117
1964	0.138	0.014	0.061	0.124
1965	0.151	0.014	0.064	0.137
1966	0.147	0.013	0.062	0.134
1967	0.149	0.016	0.056	0.134
1968	0.165	0.014	0.062	0.151
1969	0.167	0.015	0.062	0.152
1970	0.183	0.018	0.061	0.165
1971	0.181	0.019	0.062	0.162
1972	0.182	0.023	0.062	0.159
1973	0.159	0.018	0.061	0.140
1974	0.140	0.017	0.059	0.123
1975	0.162	0.017	0.067	0.144
1976	0.164	0.017	0.068	0.147
1977	0.185	0.019	0.064	0.167
1978	0.189	0.017	0.067	0.172
1979	0.198	0.020	0.074	0.178

Sources : Calculated using Tables 3.3 and 3.5.

Remark : Rows may not exactly add to total due to rounding errors.

(consumption plus transfers) and capital.

As revealed from Figure 3.2 earlier, current expenditure has been increasing rapidly in recent years. The share of current expenditure in total expenditure fell from a maximum of 84.75 per cent in 1961 to a minimum of 66.32 per cent in 1970. After 1970 its share in total expenditure started to rise and it was 76.51 per cent in 1979 (Table 3.10). It can be seen from

Table 3.10

Percentage Shares of Various Expenditures in Total Expenditure, at 1975 Prices

Year	General Public Services	Defence	Edu- cation	Health	Social Security and Welfare	Economic Service	Other	Interest on Pub- lic Debt	Subsidies and tra- nsfers	Capital	Total
1960	22.00	27.47	17.63	2.87	0.41	2.05	1.10	4.92	6.31	15.25	100.00
1961	23.50	28.39	18.34	2.99	0.41	2.31	0.95	3.93	5.04	14.12	100.00
1962	22.48	24.92	16.50	2.66	0.45	2.44	0.55	4.37	6.76	18.89	100.00
1963	24.02	24.22	15.12	2.70	0.40	2.80	0.40	4.77	5.64	19.93	100.00
1964	23.17	23.26	14.40	2.68	0.45	3.04	0.27	4.67	5.55	22.51	100.00
1965	23.52	21.98	12.84	2.38	0.46	2.84	0.23	4.65	4.92	26.18	100.00
1966	23.33	21.95	12.73	2.41	0.48	2.96	0.27	4.48	4.64	26.75	100.00
1967	20.43	22.13	11.56	2.34	0.43	2.87	0.19	5.40	5.05	29.59	100.00
1968	19.75	22.77	11.78	2.58	0.41	3.03	0.19	4.98	3.39	31.12	100.00
1969	19.01	23.43	11.54	2.45	0.38	3.20	0.19	5.42	3.53	30.86	100.00
1970	17.08	23.33	10.81	2.05	0.35	2.69	0.18	5.44	4.37	33.68	100.00
1971	17.49	23.67	11.54	2.27	0.37	2.60	0.23	7.15	3.34	31.34	100.00
1972	16.35	22.46	12.40	2.30	0.36	2.48	0.23	7.92	4.49	30.99	100.00
1973	17.87	26.42	14.37	2.51	0.37	2.78	0.29	8.20	3.40	23.79	100.00
1974	18.74	27.03	17.38	2.68	0.38	2.88	0.30	8.66	3.67	18.27	100.00
1975	17.42	22.81	16.22	2.62	0.35	4.52	0.27	7.09	3.55	25.15	100.00
1976	16.91	25.54	16.58	2.87	0.34	4.51	0.31	6.44	3.90	22.60	100.00
1977	15.57	25.96	13.86	2.66	0.30	1.96	0.29	5.80	4.21	29.40	100.00
1978	15.04	27.70	15.27	2.90	0.33	1.87	0.28	6.07	2.99	27.54	100.00
1979	15.70	29.13	16.12	3.03	0.31	1.69	0.27	6.82	3.43	23.49	100.00

Source : Calculated using Table 3.3.

Rows may not exactly add to total due to rounding errors.

Tables 4.1 and 4.5 that the share of current expenditure in GNP remained fairly constant around 10 to 11 per cent in the 1960s but it started to rise in the 1970s and reached 15.18 per cent in 1979. Except for a few years the major portion of current expenditure is again accounted for by the item defence. Moreover, the item defence is responsible for the rapid increase in current expenditure, recently. This is due to the increasing arms purchases which are considered current expenditure. This implies (though not in our area of concern) that government has contributed considerably less to the expansion of domestic absorption capacity than it would appear from aggregate figures.

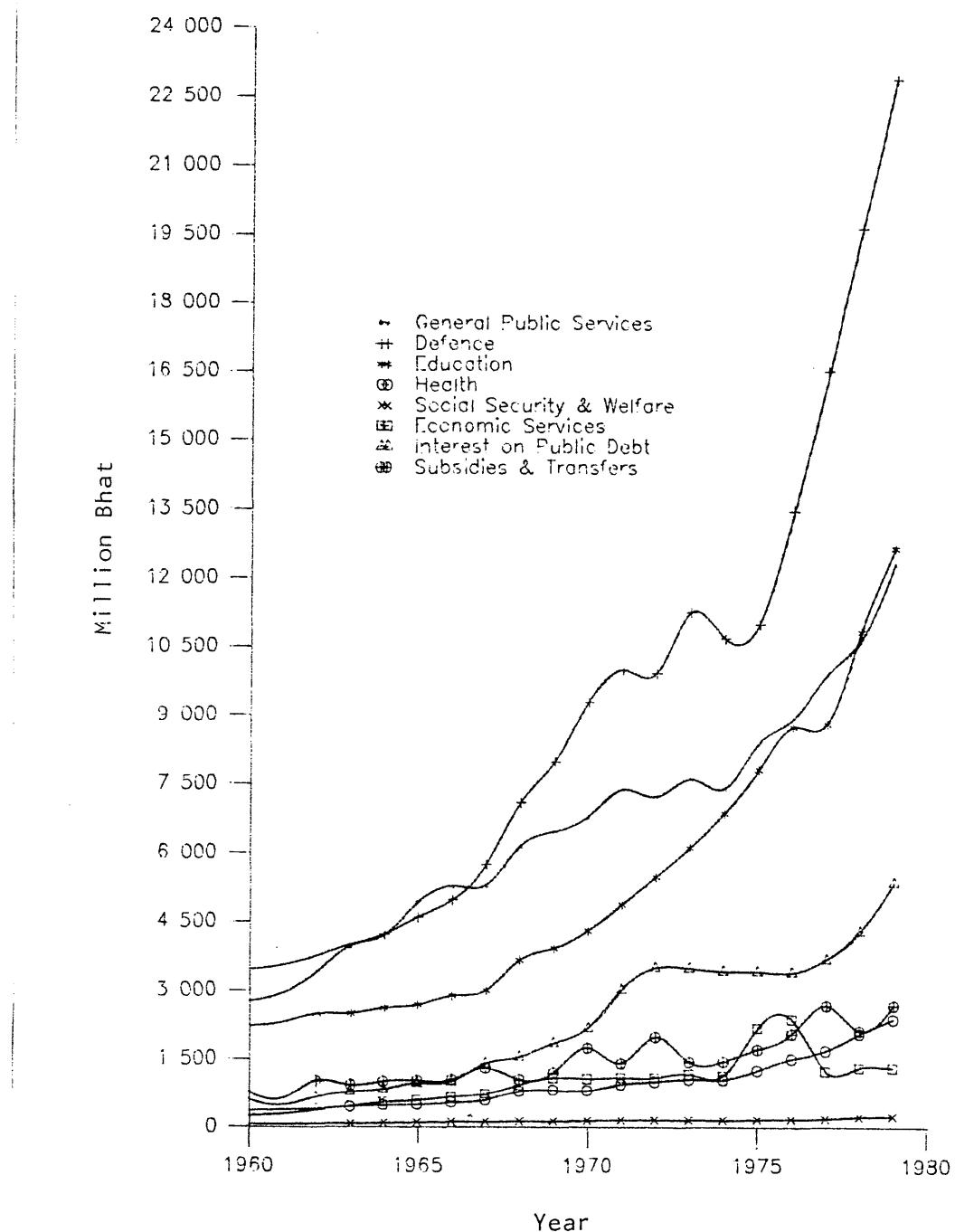
It is apparent from the above that the share of capital expenditure in total expenditure firstly rose and then fell. The share of capital expenditure in GNP and in the nation's capital formation increased relatively faster in the 1960s but it is declining after 1970.

3.6 Expenditures by Functional Categories

The basic trend of various categories of current government expenditure are shown in Figure 3.7. It was not possible to categorise capital expenditure functionally simply because of the lack of data. In absolute terms there was not a single item in which government expenditure did not increase over time. The defence expenditure grew faster than other major items. Expenditure on health and education also appeared rapidly expanding components in recent years. Other items growing considerably were general public services and interest on public debt. Expenditures on social security and welfare (goods and services) and on transfer items were growing rather slowly. When various functional categories of expenditure were compared with GNP, the shares of defence, education, health and of interest on public debt were found increased in recent years compared to their previous levels.¹⁷ The share of general public services in GNP did appear fairly constant overall.

The main purpose of the functional classification is to view the changing composition of government expenditure. For this particular purpose it appears useful to talk in terms of the increased amount accounted for by various functional categories in total increase in different periods of time. Table 3.11 presents a broad picture of the shift in preference given to various items. For the period of first 10 years (1960-1969) as a whole, 40 per cent of total increase in government expenditure was accounted for by capital formation. Defence and general public services stood second (21.1%) and third (17.2%) respectively. Education accounted for 8 per cent, health 2.2 per cent and transfers 7.6 per cent. When these figures were compared with the figures for the second ten-year period (1970-1979) some interesting

Figure 3.7: Current Expenditure by Function, at 1975 Prices



Source: Table 3.3.

shifts appeared in government's allocation of its increased resources. The absorption of capital account in the total increase of the second 10 years was 17.8 per cent which was a sharp fall from 40 per cent in the first period. Similarly general public services received only 13.2 per cent of the total increase in the second period compared to 17.2 per cent of the total increase in the first period. While defence, education and health

Table 3.11

 Changing Composition of Government Expenditure
 (at 1975 prices)

Figures in Million Bhat

Period	Increase in										Total Govt. Expenditure
	General Service	Defence	Edu-cation	Health	Social Security and Welfare	Eco-nomic Service	Other	Inter-est on Public Debt	Subsi-dies and trans-fers	Capital	
1960-1969	3709	4528	1714	473	79	833	-74	1228	409	8603	21502
	(17.2)	(21.1)	(8.0)	(2.2)	(0.4)	(3.8)	(-0.3)	(5.7)	(1.9)	(40.0)	(100.0)
1970-1979	5865	14912	8738	1551	116	237	150	3518	1490	7944	44521
	(13.2)	(33.6)	(19.6)	(3.5)	(0.3)	(0.5)	(0.3)	(7.9)	(3.3)	(17.8)	(100.0)

** Figures in parentheses are percentage of total increase in government expenditure

Source : Calculated using table 3.3.

accounted for an increased percentage of the total increase; 33.6 per cent, 19.6 per cent and 3.5 per cent in the second period compared to 21.1 per cent, 8 per cent and 2.2 per cent in the first period, respectively. Transfer items also received an increased percentage, that is, 11.2 per cent of the total increase in the second period compared to 7.6 per cent of the first period's total increase.

The division of government expenditure into central and local levels has also been considered important in understanding the scope for the development of government expenditure (Peacock and Wiseman 1967). Peacock and Wiseman (1967) and Pryor (1968, 72) argue the tendency for increased centralization of government expenditure for a number of reasons. The most important reasons, according to them, are improved transport and communications accompanied by economic development which puts pressure on the government for a uniform standard of public services. The change in the nature of the economic environment demands a control of previously local problems such as education, employment, pollution, etc., and the rising share of government expenditure requires more efficient ways of raising revenue. All of these lead to an increased centralization of government expenditure. On the other hand, Tiebout (1961), Bird (1970, 181-183), Rothenburge (1970) and Heald (1983, 236) see the relative scope for the expansion of local expenditure mainly from the point of view of different local needs and preferences, lower costs of decision making, and accountability.

Data on central or on local government expenditure in Thailand compatible to the definition of general government were not available. However, one thing could be said about the tendency of centralization or decentralization of government expenditure. This is that it depends on the properties of those categories of expenditures which are growing faster than others and on their weight in total expenditure. To illustrate this let us look at the case of Thailand. The items defence, education and health did increase recently at a faster rate than other major items and their combined weight in total expenditure is high. The outcome is to increase the centralization of government expenditure because defence is purely the government's responsibility, and the items education and health are also mainly financed by the central government. On the other hand, if items related to public utilities such as water, sewerage, electricity, garbage collection, etc. were increasing faster than other items and were carrying greater weight in total expenditure then the outcome would have been increasing decentralization.

Up to this point we have only considered some factors potentially affecting the growth of total government expenditure. Nothing has been said about the factors influencing the growth of various components of government

expenditure. This chapter also pointed out that a study of government expenditure at an aggregate level may conceal a great many factors responsible for the growth in government expenditure. In the next chapter an attempt will be made to analyse major categories (under different classification than we have mentioned so far) of government expenditures with a view to seek explanations in greater detail.