Chapter II
Review of Literature

2.1. Introduction

There has been a proliferation of fiscal decentralisation studies over the past several years. These studies have focused on various aspects of the economy and how they are impacted by fiscal decentralisation. Most of these studies, however, have been at the cross country or national level. Numerous studies have also focused on Eastern European countries as well as developing and transition countries. None of the studies reviewed have studied fiscal decentralisation at the county government level or an equivalent local level of government. The effect of fiscal decentralisation on economic growth, government size, healthcare system, and the macro economy are among the studies that have been done in the area.

2.2. Fiscal Institutions

Von Hagen (1992) is the first to investigate the impact of budgeting procedures on fiscal performance in EU countries. The idea is that the common pool problem may manifest itself during different phases of the budgetary process. When the budget is drafted within the cabinet, biases may arise due to the fact that spending ministers may recognise the full benefits of their own specific spending proposals, but fail to internalise the costs for the tax-paying population at large. During the decision-making procedure on the cabinet proposals in parliament, individual members of
parliament may internalise the interests of specific constituencies within society but not the costs of their amendment proposals for society as a whole. Finally, biases may again show up during the implementation phase of the budget, in the way policy reacts to unforeseen events and the way supplementary budgets are drafted, decided upon and implemented. Alesina et al. (1996) also investigate the hypothesis that institutions matter, but organise their aggregate index of institutions in a different way. Their aggregate index also contains three elements that may be conducive to fiscal discipline. The first is ex ante fiscal constraints. Such constraints may include fiscal rules, but also requirements that the budget should be consistent with a macroeconomic program approved ex ante. The second is top-down hierarchical procedures. These include the position of the minister of finance within the cabinet, but also the type of amendment rules as used in the discussion with parliament. The third is fiscal transparency. In transparent budgets may allow politicians to strategically manipulate information, so that they can appear fiscally restraint even when their actions are in fact undisciplined. The empirical evidence that has used aggregate indices of budgetary institutions for explaining budgetary outcomes strongly indicates that institutions matter. By now the same overall conclusions have been reached for different sample periods and different groups of countries. For example, De Haan et al. (1999) and Hallerberg et al. (2001) focus on EU countries, Gleich (2003), Yläoutinen
(2004) and Fabrizio and Mody (2006) all concentrate on central and eastern European countries while Alesina et al. (1996) focus on Latin American countries. Moreover, methodologies have evolved from bivariate analysis as in Von Hagen (1992) to the use of panel studies that employ time variation in the index of institutions and control for a range of variables, as in de Haan et al. (1999), Hallerberg et al. (2001) and Fabrizio and Mody (2007). In sum, a growing body of empirical evidence has indicated that institutions matter. Apart from issues concerning the direction of causality between fiscal institutions and fiscal outcomes, another criticism on this direction of research is that it is less clear which institutions matter (Poterba, 1996). In the indices used, all institutional elements are equally weighted and are therefore seen as perfect substitutes. In order to address this issue, both De Haan et al. (1999) and Fabrizio and Mody (2007) concern the question which sub-indices matter most, on the basis of separate regressions that include these sub-indices. The conclusion reached by De Haan et al. (1999) is that the position of the legislature, the presence of binding constraints and flexibility during the execution of the budget seem to matter most. Fabrizio and Mody (2007) conclude that, while each individual component of the budget process matters (i.e. budget preparation, authorisation and implementation), the implementation phase seems to matter most, thus showing only partial overlap with earlier findings of De Haan et al. (1999).
From above literature, a fiscal institution is very important for the budgetary process of any country.

2.3. Fiscal Rule

Koen and van den Noord (2006) have pioneered the bottom up approach. They start by clarifying the difference between one-off measures and creative accounting. One-off measures refer to government decisions of a non-recurrent nature. An example is the acceleration of tax intakes, which improves the contemporaneous fiscal position but worsens it in the next year. Creative accounting refers to unorthodox treatment of operations that affect the fiscal balance or public debt but do not improve the net worth of the government. An example is the use of Public Private Partnerships (PPP), in which the government does not own the assets but rather pays for the services provided by a private company, for the mere reason of improving the current fiscal balance.

Von Hagen and Wolf (2006) and Buti et al. (2006) use the top-down approach to creative accounting. Starting from the statistical identity that links the budget balance to debt developments they investigate the role played by changes in the stock of gross debt that cannot be explained by developments in the flow as measured by the budget balance. This is called the Stock Flow Adjustment (SFA); a positive SFA reflects an increase in the debt ratio that cannot be explained by the budget balance. Von Hagen and
Wolf (2006) acknowledge that the SFA does not necessarily represent creative accounting, but argue that still it can be used as a reasonable proxy for it. They find that after the introduction of the EU fiscal rules, a systematic relationship between the budget balance and the SFA can be detected. This suggests that the SFA is used instead of the deficit during the time period when the fiscal rules were in place, and is interpreted as evidence that confirms the vulnerability of fiscal rules to creative accounting. Buti et al. (2006) go one step further as they break down the SFA in its constituent components are differences between the cash and accrual recording bases of transactions. This discrepancy between debt and deficits results from the fact that the debt ratio is recorded on a cash basis while the budget balance is recorded on accrual basis on the other hand differences between the net and gross recording of financial transactions. A discrepancy according to this effect can occur because the budget balance is measured net of financial transactions, while the debt ratio is measured gross of financial assets. The accumulation of financial assets therefore gives rise to a positive SFA (increase in the debt ratio not matched by a decrease in the budget balance) while the decumulation of financial assets implies a negative SFA; (iii) valuation effects and other statistical adjustments. In a related approach that focuses on the balance sheet of the government, Milesi-Ferretti and Moriyama (2004) also find that governments have contained the rise in the public debt ratio, or reduced it, by decumulating
financial assets, and that this decumulation was stronger in countries with large public debts.

2.4. Overview of the Economics of Fiscal Decentralisation

During the last two decades, the economic reforms in different parts of the world largely focused on the role of markets and understated the importance of the organization of the public sector in achieving broader objectives such as economic stability, sustainable growth, and provision of basic public services equitably across people and jurisdictions (World Bank, 1999). The key element underlying the interest in fiscal decentralisation is to achieve these objectives by increasing efficiency, transparency, and accountability in the public sector. In a fiscally decentralized system, the policies of subnational branches of governments are permitted to differ in order to reflect the preferences of their residents. Furthermore, fiscal decentralisation brings government closer to the people and a representative government works best when it is closer to the people (Stigler, 1957). The theoretical argument for fiscal decentralisation is formulated as each public service should be provided by the jurisdiction having control over the minimum geographic area that would internalize benefits and costs of such provision (Oates, 1972.) However, much of the established theoretical literature of fiscal federalism has been based on issues that arose within developed countries, particularly the US and Canada and the definition and implementation of fiscal decentralisation differ greatly across developing countries due to
differences in economic and political structures. This diversity creates challenges to measure and compare the degree of decentralisation across countries and to make generalizations about it. In this study, the definition of decentralisation provided by the World Bank is adopted: “Decentralisation – the transfer of authority and responsibility for public functions from the national government to subordinate and quasi-independent government organisation” (World Bank, 2003, p.1). Among many different economic ideas about decentralisation of public functions to SNGs, and the associated issue of public finances under decentralised systems, seminal contributions were made by Tiebout (1956), Musgrave (1959) and Oates (1972), all of who laid the strong foundation for the significant discussions of fiscal decentralisation. Mancur Olson (1969), through his concept of fiscal equivalence, also made an important contribution1. These studies, in conjunction with the public choice approach to multi-tier government initially developed by Geoffrey Brennan and James Buchanan in The power to tax – Analytical foundations of a fiscal constitution (1980), represent seminal works in the first generation literature on fiscal decentralisation.

2.5. Musgravian fiscal framework and federalism

In the influential book, the theory of public finance – A study in public economy, Musgrave (1959) introduced three different branches or categories of public finance: economic stabilisation, income distribution, and resources
allocation. These branches have come to represent the benchmarks from which issues in public economics are treated by the non-public choice group within their first generation studies of fiscal decentralisation. In general terms, each branch is individually subject to consistent theoretical analysis. Between these branches, analytical consistency is more difficult because of diverse and subjective assessments of the relative importance of stabilisation, income distributions and efficiency. In the specific public finance perspective on federalism, the Musgravian branches of public finance proved useful in setting the constraints to fiscal decentralisation (stabilisation and distribution) and the potential benefits of fiscal decentralisation (efficiency). The first branch is economic stabilisation. Fiscal and monetary policies may contribute to stable economic development. The key issue for theory is whether fiscal decentralisation enhances or detracts from economic stability and compromises the general macroeconomic goals of governments. The received view among first generation theorists is clear: decentralisation of fiscal arrangement does not serve to enhance the macro stabilization objective; rather, macro stabilisation represents a constraint on the feasible degree to which fiscal powers can be devolved to SNGs (Oates, 1972, p.7). The second branch of public economics concerns income distribution. Economic goods are produced and governments typically play some role in modifying the market determined distribution of goods across members of a given society. Taxes
may be progressive and welfare services may target lower income members of society. Again, it appears that decentralisation of fiscal arrangements does not tend to systematically advance society’s income distribution objectives because economic interdependencies between the economies of sub national jurisdictions act to reduce any diversity in the distribution of goods that would exist across lower level governments. In the absence of diversity in redistribution goals between SNGs, if the demand for redistribution is nationally uniform, the case for assigning responsibility for redistribution to SNGs is weakened. In short, an income redistribution policy has a greater chance of success if it is carried out at the national level (Oates, 1972, p.9). 

Tiebout (1956) introduced the notion of “impure” or local public expenditures to the theory of public finance. He did so to analyse political and fiscal decentralisation in terms of competition among localities, with the mobility of citizens between localities providing the mechanism for preference revelation. The essence of the Tiebout hypothesis is that consumer demand for local public goods can be revealed when citizens choose the jurisdiction which provides him or her with the best net benefit. The hypothesis states that, with mobility, consumer-voter’s preferences can be revealed and consumers will end up at, or at least close to, the point where their demand for impure public goods is met with due recognition of the costs of supplying this demand. This is now generally known as “Tiebout sorting”. In particular, this notion of Tiebout’s was primarily a
response to the problem of the under-provision of public goods as posed by Paul Samuelson. Tiebout shows that when public goods are provided by competing regions, sorting according to preferences would induce an efficient provision. Tiebout’s notion of “impure” public goods differs from global or pure public goods, as developed by Samuelson (1954), which are defined by two main characteristics: “non-excludability” and “non-rivalry” in consumption. Non-excludability means that once public goods are produced, no one can be excluded from consuming them. Non-rivalry requires that the marginal benefits that any consumer derives from the consumption of public goods do not change if the number of consumers increases. National defence is the classic example of the pure public good. Once this service is produced, it is impossible, or at least inefficient, to exclude any person in a community from its consumption (Buchanan, 1999). Additional residents are added to a jurisdiction and consume pure public goods without any additional costs. The characteristic of nonrivalry of pure public goods has implied a consequence which was mentioned by Samuelson (1954). The consequence is that the optimal level of public goods provision cannot be obtained since there is no mechanism for preference revelation. In response to Samuelson’s concerns over preference revelation of public goods, Tiebout (1956) argued that many public goods, such as parks, are actually “impure” because they are subject to congestion (i.e. they are not rival, or progressively less rival, beyond some locally
defined boundary). When the number of users increases, public goods consumption may become congested. Tiebout’s vision is in contrast with Samuelson’s works, which emphasizes that preferences for publicly provided goods are not revealed because the revelation would result in an increase in payment to the citizen who declares his preference without any increase in the quantity of the public good provided (Hamilton, 1987). In short, the Samuelsonian approach considers “pure” public goods whereas the Tiebout approach emphasizes the “impurity” of public goods. Mobility among jurisdictions is possible even though there are some typical obstacles to consumer mobility, such as job commitment and family connection (Oates, 2005, p.350). In a decentralised society, consumers will effectively sort themselves into homogenous groups whose demand for certain public goods and services are the same (Oates, 2005, p.353). As such, decentralised provision of local public goods and services is essential. A significant aspect of Tiebout sorting is its relevance to policymakers, and the consequent implications for fiscal arrangements. Policies to encourage residential mobility and develop knowledge among residents of public benefits and costs will encourage migration which acts as a force that contributes to improvements in the efficiency of government expenditures. It is also argued that the higher the revealed degree of mobility of households from region to region, the lower the efficiency of the allocation of resources, other things held constant (Tiebout, 1956). This is because there would be no
mobility of households and firms when all sub national units are in an equilibrium state – benefits provided would be consistent with costs. As a result, due to the pressure on governments from this mobility, production efficiency will be enhanced.

2.6. Fiscal Equivalence and the Decentralisation Theorem

Olson (1969) introduced the seminal notion of “fiscal equivalence” to economics within a general framework for investigations of fiscal decentralisation. “Fiscal equivalence” is the notion which posits that, for every collective good, there is a unique “boundary” for which a separate government is needed, so that “there can be a match between those who receive the benefits of a collective good and those who pay for it” (Olson, 1969, p. 483). In broad terms, it positively associates the efficiency goal of public economics with aligning the costs and benefits of impure public good provision with multi-tiered federal systems, each with overlapping physical boundaries, but each with unique boundaries relating to the provision of specific public goods. The next seminal contribution was made by Oates in his monograph Fiscal Federalism (1972). Oates implicitly blended Olson’s notion of fiscal equivalence with aspects of Tiebout’s notion of impure public goods in his theory of fiscal decentralisation, although without focusing directly on household mobility or sorting. He argued that there should be a variation of the provision of impure public goods and services from governments since inhabitants have different tastes for public services.
Oates formalises his treatment of the issue by defining public goods in a manner that comprises both pure and impure public good attributes. All that matters is that benefits from non-excludable and non-rival public goods are linked to a population in a geographic subset (impure public goods) or the union of population from all such subsets (pure public goods). From this, he developed the Decentralisation theorem: “For a public good – the consumption of which is defined over geographical subsets of the total population, and for which the costs of providing each level of output of the good in each jurisdiction are the same for the central or the respective local government – it will always be more efficient (or at least as efficient) for local governments to provide the Pareto-efficient levels of output for their respective jurisdictions than for the central government to provide any specified and uniform level of output across all jurisdictions” (Oates, 1972, p. 35). Oates’ Decentralisation theorem has a clear rationale. Welfare is maximised when specific public goods are provided by local governments whose jurisdiction corresponds to the subset of the national population for which the demand for specific public goods and services is homogenous. If the national government is assumed to provide the same bundle of public goods and services across all sub national jurisdictions, then it will not be possible for the national government to provide the efficient level unless preferences are homogeneous for all members of the population. Oates’ assumptions on uniform provision of public goods by national governments
do not reflect reality in any strict sense. Indeed, this assumption has been criticised by Brennan and Buchanan (1980).

### 2.7. Public choice and Leviathan

The final stream of the first generation theory derives from the public choice literature, which reaches back into intellectual history for its motivation. In 1660, Thomas Hobbes described the notion of the Leviathan, or to be called a Commonwealth or State, as “an artificial man, though of greater stature and strength than the natural, for whose protection and defence it was intended; and in which the sovereignty is an artificial soul, as giving life and motion to the whole body…” (Hobbes, 1660, p.1) Brennan and Buchanan (1980) revived the notion of the State as Leviathan. They developed the hypothesis that the main interest of the government is to tax heavily so that they have financial resources to spend. In this representation, the government is a monolithic Leviathan, which always seeks to maximise its taxation revenue. In response to this issue, the only way to limit the extent of government oversupply, and as a consequence, over taxation, is to constrain governments through effective constitutions that decentralise political and fiscal authority. When political action has the motivational characteristics of Leviathan, political and fiscal decentralisation divides, competition between public bodies reduces the force to grow the public sector. In addition, the “protective state”, which establishes the government as enforcer of individual rights and contracts, carries the functions which can be
effectively allocated, by competition processes, to the relevant level of
government. It is hypothesised that if these protective functions are all
assigned to the national government, this government unit has a real
incentive to maximise a net surplus because there is no effective controls on
its taxing powers. The presence of fiscal decentralisation constrains
government, encouraging it to devolve to increase the efficiency in
providing goods and services to its respective jurisdictional inhabitants,
otherwise local citizens will vote on their feet. This contributes an effective
constraint on excessive taxing from all government units. As a result, the
size of the SNGs, and then, the size of the aggregate government sector,
decreases.

In general, the Leviathan hypothesis and public choices approach to fiscal
federalism provided a new perspective on government which highlighted the
main advantage of fiscal decentralisation as a force for maintaining smaller
government. “Total government intrusion into the economy should be
smaller, ceteris paribus, the greater the extent to which taxes and
expenditures are decentralised, the more homogeneous are the separate
units, the smaller the jurisdictions, and the lower the net regional rents”
(Brennan and Buchanan, 1980, p.185).
2.8. Practical issues in fiscal decentralisation

Before considering the development of the fiscal decentralisation theory as particular issues of fiscal decentralisation, it is useful to look at the main practical issues of fiscal federalism from a purely descriptive perspective. This is because theory, at least initially, is developed from observations of the phenomena in question. In addition, fiscal decentralisation has attracted a special attention from international institutions such as the World Bank. This organisation views fiscal decentralisation as a mechanism to encourage and enhance economic growth, particularly for developing economies.

The four main practical issues that concern fiscally decentralised systems are: the assignment of responsibility for the provision of services across different tiers of government; the assignment of revenue-raising powers; intergovernmental fiscal transfers; and sub national borrowing (World Bank, 2003, p.3). Every society faces these issues when establishing a multi-tiered fiscal system, or when maintaining that system. Each of these issues will be discussed in turn. In the case of many developed federations such as Australia, Canada, and the US, spending from the national (federal) government dominates in some fields, especially in unique areas of national interests, such as defence and international relations. Provincial governments in Canada also hold a significant discretion on spending for education, law, and order. This level of government is mainly responsible
for spending on recreational and cultural areas, local roads and parks (Krelove et. al., 1997).

2.9. Studies on the Impact of Fiscal Decentralisation

Theoretically, fiscal decentralisation – the devolution of fiscal responsibilities and power from the national government to subnational governments – can enhance or detract from economic growth. Similarly, no consensus has developed in the empirical literature over the direction and strength of these linkages between structure of government and growth. While some authors have found a positive relationship between fiscal decentralisation and economic growth (Oates, 1993; Yilmaz 1999; Iimi, 2005), others find evidence of the contrary (Xie, Zou and Davoodi, 1999) while others establish no direct relationship (Martinez-Vazquez and McNab, 2005; Thornton, 2007). Some studies have found differing effects in developed versus developing countries, with no relationship found for developed countries but a negative relationship for developing countries (Davoodi and Zou 1998; Woller and Phillips, 1998). Alternatively, in studies of high-income OECD countries, a number of studies have found results that suggest that a medium degree of decentralisation may be optimal (Thiessen, 2003; Eller, 2004; Bodman and Ford, 2006; Campbell, 2008). Single country studies have also produced mixed results. In an analysis of the United States of America, Xie et al. (1999) found that existing spending shares for state and local governments were consistent with growth
maximization and any further fiscal decentralisation would be detrimental to USA growth. On the other hand, Akai and Sakata (2002) and Stansel (2005), based on disaggregated analyses of USA states and metropolitan areas, concluded that fiscal decentralisation contributes positively to economic growth. In an analysis of economic growth in Spain, Carrion-i-Silvestre et al. (2008) found that decentralisation has a negative effect at the aggregated, economy-wide level but a positive relationship for communities with a high degree of fiscal autonomy. Finally, Bodman et al. (2009) analysed the impact of fiscal decentralisation on Australian macroeconomic conditions and economic growth and found no straightforward impact. Such a range of results highlights the lack of consensus in the literature on the relationship between fiscal decentralisation and economic growth. Davoodi and Zou (1998) use panel data from 1970 – 1989 for 46 countries to study the effect of fiscal decentralisation on economic growth. They estimate an ordinary least squares (OLS) model in which the dependent variable is the per capita GDP growth rate, and the independent variables are human capital (measured by secondary school enrollment rate), GDP, average tax rate, population growth, fiscal decentralisation, and country and time fixed effects. The study uses data from national and subnational government levels. The authors find a negative relationship between fiscal decentralisation and growth in developing countries but no relationship in developed countries. Xie et al. (1999) use time series data from 1948 –
1994 to evaluate the effect of fiscal decentralisation on economic growth in the U.S. They estimate an econometric model in which the dependent variable is per capita output growth rate while the independent variables are the average tax rate, labor growth rate, Gini coefficient, fiscal decentralisation, openness of the economy (measured by ratio of foreign trade volume to GDP), and inflation rate. The average tariff rate, used as an alternative measure of openness of the economy, is computed as the ratio of total customs duties to total imports for consumption. Other variables included in the model are shares of government spending at different levels, price index of energy products, and gross private investment in physical capital. The share of government spending is defined as the ratio of subnational government spending to consolidated government spending. Three levels of government (federal, state, and local) are identified in the study. Local government spending shares had negative coefficients while state spending shares had positive coefficients. All the coefficients were insignificant, however. Despite the lack of significance of the coefficients, they conclude that the insignificant coefficients in their analysis indicate that the current government spending shares are consistent with growth maximization. Further decentralisation, they argue, will move the economy away from the growth maximizing path and may thus be harmful to economic growth in the U.S. Akai and Sakata (2002) use U.S. state level data to evaluate the contributions of fiscal decentralisation to economic
growth. They estimate a linear regression model in which change in gross state product is the dependent variable. Independent variables are population growth rate, state economic characteristics, the level of gross state product, fiscal decentralisation, openness (the ratio of state exports to other countries and other states to nominal gross state product), income distribution measured by the Gini coefficient, and growth rate of gross state product. Other independent variables include quality of regional human capital (measured by number of patents), level of human capital (measured by educational levels and labor quality), and region specific effects (measured with a dummy variable indicating whether the state is Southern or not). The authors find a positive relation between fiscal decentralisation and economic growth at the state level in the U.S. Stansel (2005) studies the relationship between local decentralisation and local economic growth in U.S. metropolitan areas. He uses cross-sectional data from 1960 – 1990 for 314 U.S. metropolitan areas to evaluate the effect of decentralisation on economic growth and concludes that local decentralisation enhances economic growth. Jin and Zou (2002) study how fiscal decentralisation affects government size. They use a cross-country panel data with three levels of government. Their methodology involves two models; a fixed effects model and a feasible generalized least squares (FGLS) model. Government size is the dependent variable. Independent variables include GDP, fiscal decentralisation, urbanization (measured by urban population as
a share of total population), openness of the national economy (measured by the sum of exports and imports as a percentage of GDP), and country fixed effects. The authors use dummy variables for whether the country is a federation, has elected officials, has constraints on sub national government borrowing, and has an independent central bank. If the central bank governor does not change within six months of a change in political leadership of the country, the central bank is considered to be independent. The study concludes that fiscal decentralisation leads to bigger sized sub national governments. Bigger sized governments are presumed by the authors to be less efficient and less cost effective. Many studies done on fiscal decentralisation in China include those by Lin and Liu (2000) and Zhang and Zou (1998). In Lin and Liu’s 2000 study on fiscal decentralisation in China, they investigate whether the Chinese economy has been positively affected. They test whether fiscal decentralisation increases economic efficiency. The econometric model in their study is a Cobb Douglas production function. Per capita output is modeled as a function of per capita capital, technology level, and the fraction of the population in the labor force. The growth rate of output is dependent on technology and capital. Technology includes differences in resource allocation and endowment as well as institutional differences. The technology variable also includes unobservable location specific characteristics. Fiscal decentralisation is introduced in the model via the reform programs upon
which technology is dependent. Lin and Liu (2000) use panel data on China’s provinces. The data span a 23 year period starting from 1970. The dependent variable is GDP and the independent variables used include measures of fiscal decentralisation, rural reform, price of farm products compared to non-farm products, per capital real gross domestic product, population, the rural population share, share of non-state-owned enterprises in total industrial output, growth rate of per capita investment, and provincial dummies. As noted by many other authors, measuring fiscal decentralisation is a challenge. Numerous studies have used the share of sub national government spending in total government spending. Lin and Liu use a different measure since this data is not readily available in some areas. Refer to Lin and Liu (2000) for a detailed discussion on why these traditional measures are not appropriate in the Chinese case. Unlike other decentralisation studies, they use the marginal revenue increments retained by provincial governments as a measure of fiscal decentralisation. In addition to the above measure, average revenue retention rates were also used to measure fiscal decentralisation. The results indicate a positive relation between fiscal decentralisation and growth. Their results also show that other key factors that influence economic growth are rural reform, capital accumulation, and non-state sector development. Zhang and Zou on the other hand use a 12 year panel dataset from 1980 – 1992 to study decentralisation in China. The dependent variable used is the provincial
income growth rate and the independent variables are measures of fiscal decentralisation, investment rate, and growth rate of labor, share of total volume of foreign trade in province income, inflation rate, tax rates, and provincial fixed effects. Fiscal decentralisation was measured as the share of provincial spending in central government spending. Using a least square regression model, Zhang and Zou (1998) find a negative relationship between fiscal decentralisation and economic growth.

2.10. Literature on the Advantages and Disadvantages of Fiscal Decentralisation

As stated by Tanzi (1996), “the main economic justification for decentralisation rests largely on allocative or efficiency grounds”. With fiscal decentralisation, local governments are likely to provide different combinations of public goods and services since they are more likely than centralized governments to take into consideration the different tastes of residents. Proponents of decentralisation believe that economic efficiency is achieved by decentralized governments because they provide the mix of output (goods and services) that best reflect the preferences of individuals living in the community (Oates, 1972). Centralized governments on the contrary are more likely to provide a uniform package of output products across all jurisdictions. If individuals have variations in their consumption preferences, then the centralized provision of uniform output will result in inefficient resource allocation. Thus as stated by Oates (1972), “a
A decentralized form of government therefore offers the promise of increasing economic efficiency by providing a range of outputs of certain public goods that corresponds more closely to the differing tastes of groups of consumers”. Local provision of public goods could also be associated with lower administrative overheads because agency and monitoring costs are likely to be lower (Oates, 1999). In addition to benefits from economic efficiency, fiscal decentralisation is also thought to increase accountability of local officials, especially when they are elected (Oates, 1999). Government officials are more likely to allocate resources efficiently and do their best to provide optimal levels of economic development and public services when they are closer to the electorate. Otherwise, they risk the chance of not being re-elected. Also, when local jurisdictions have to fund the services they provide, they are more likely to do so at a cost efficient level where the marginal benefit equals the marginal cost if services are decentralized rather than centralized (Tanzi, 1996). According to Thiessen (2001), central governments could be more inclined to spend less on issues of local concern such as education, child care, and local infrastructure and other concentrate more on national defense. Under fiscal decentralisation, local communities serve as “research labs” for the rest of the country (Osborne, 1988). Decentralisation allows experimentation and innovation in the public-service production process (Tanzi, 1996). Local experimentation may lead to increased technological progress in the production of
governmental goods and services and public policy (Oates 1999). When local communities develop and implement economic development programs in a decentralized system, programs are first implemented on a relatively small scale. If the program is a success, then other parts of the country may adopt it, too. However, if the program fails to meet its objectives, then only a few local communities will suffer rather than the whole nation. According to Oates (1999), the recent legislation that transfers the responsibility for welfare programs to the states represents a recognition of the failure of existing programs and an attempt to make use of the states as ‘laboratories’ to find out what sorts of programs work best. The experimentation with different service production processes by local governments can lead to gains from competition among local governments (Oates, 1999). Competition is an advantage when it leads local governments to adopt more efficient technologies of production than they had previously used. Oates argues that with a highly centralized government that provides all public goods with little or no competition, it is likely that there will be little or no incentive to be innovative and efficient. Brennan and Buchanan (1980) argue that decentralisation is likely to be associated with smaller public sectors. They contend that this produces economies that are more efficient.

A drawback of fiscal decentralisation lies in the likelihood of redundancies and duplications in public service provision (Oates, 1972). Due to decentralisation, the same program may be present in different, adjacent, or
overlapping jurisdictions. Rather than having, say, one big park between two adjacent counties, the situation arises where each community spends scarce resources to build similar parks within a few miles of each other. This may be a waste of resources if the parks provide similar services. Associated with this disadvantage of decentralisation is the loss in economies of scale (Oates, 1999). Gains from economies of scale are lost when smaller jurisdictions are in charge of providing public services whose production or delivery costs decline with scale. Each local government needs to implement its economic growth agenda independent of other local governments in a decentralized system and so might end up spending more per unit of service output because they would be operating at a smaller scale. Another disadvantage of fiscal decentralisation is “the quality of local bureaucracies” (Tanzi, 1996). Central governments are likely to have personnel with higher qualifications than decentralized governments because they provide better pay and career opportunities (Prud’homme, 1994). Local governments are likely to offer fewer opportunities for career advancement and may pay lower salaries. The presence of personnel with low qualifications in local governments, especially in rural areas, could limit the efficiency gains from decentralisation. Some rural counties, for instance, have county commissioners and managers with only a high school education or less. Urban counties on the other hand tend to have commissioners and managers with college or graduate degrees. Although competition among local
governments was mentioned as an advantage of fiscal decentralisation, it could also have a negative effect. In the case where competition between local governments leads to inefficient provision of services, fiscal decentralisation may be undesirable for the society as a whole. Communities may cut public services to drive out people who contribute little to the tax base in an effort to lower the tax burden on tax-paying firms and residents. Competition of this kind creates fiscal externalities borne by other local governments. This phenomenon has been dubbed in the literature as a race to the bottom (Brueckner, 2000; Saveedra, 2000). Fiscal decentralisation could help increase regional inequalities (Thiessen, 2001). Under fiscal decentralisation, different regions provide different mixes of public goods and services and taxes. Wealthier communities may therefore attempt to drive away poorer individuals and households from their locality. Fiscal decentralisation can therefore reinforce regional inequalities, thus decreasing economic growth (Thiessen, 2001). Finally, another drawback of fiscal decentralisation is the possible increase in corruption, especially in developing countries. It is generally believed that local governments are more easily bribed than national governments (Tanzi, 1994; Prud’homme, 1994). Oates (1994) mentions corruption as a disadvantage but does not conclude whether it is greater at the national or local level.
2.11. Literature on Economic Growth in Counties

Economic growth can be defined as a rise in national or per capita income and product (Gillis et al., 2001). Thus if the production of goods and services in a country rises by whatever means, one can speak of that rise as economic growth. Economic growth of a county could be measured by a growth in the number of people, jobs, and a growth in total earnings or employment. A lot of studies have been done on economic growth at higher government levels, especially at the national level, but since this study deals with local governments, only studies that deal with local economic growth will be reviewed. Carlino and Mills (1987) explore the factors that determine population and employment growth. They evaluate the effects of economic, demographic, and climatic variables on population and economic growth. They estimate a two stage least squares (2SLS) model with employment density and population density as dependent variables. The independent variables include percent black, interstate highway density, tax rates, crime rates, education levels (measured by median school years attained), family income, and Industrial Revenue Bonds (IRBs). Several dummy variables for metro status, regional dummies, and central city dummies are also included in the regression. Carlino and Mills (1987) find that climate influences population and employment. They also find evidence of a preference for Sunbelt states. Variables that depend on public policies such as crime rates, taxes, and IRBs had little impact on county population
or total employment growth. They conclude that since population and employment growth are interrelated, a policy option available to decision makers is to implement strategies that will help retain and attract county population and employment will follow population to such areas. An important study on local economic growth in the U.S. is the study by Deller et al. (2001). The study stresses the importance of natural amenities in determining local economic growth. Certain rural areas are experiencing rapid growth as documented by Deller et al. (2001). Rural counties experiencing rapid growth seem to be counties with non-market attributes and natural amenities. Growth in these rural counties has been in the form of increases in employment, income, housing levels and value, and population (Deller et al., 2001). The model used by Deller extends the Carlino and Mills county growth model to include income. Deller et al., test the hypothesis that local economic growth is dependent on available amenities. The amenity indexes used include climate, land, water, winter recreation, and developed recreational infrastructure. The amenity index used in this study goes a step further than the commonly used amenity scale, developed by USDA’s ERS, that is commonly used in amenities studies. Carlino and Chatterjee (2002) study employment determination at the metropolitan statistical area (MSA) level in the U.S. Their study looks at employment trends taking in to consideration densities. Two concepts namely, employment deconcentration and employment decentralisation are discussed
Employment deconcentration is defined as a decline in the share of urban employment in dense MSAs and a rise in the share of employment in less dense metropolitan areas. This deconcentration pattern has occurred both across MSAs and within MSAs. This trend, they argue, has resulted in a decrease in spatial inequality. Employment decentralization is defined as a decrease in the ‘share of MSA employment accounted for by the relatively dense counties in an MSA’ (Carlino and Chatterjee, 2002). In other words, employment decentralisation is deconcentration within MSAs.

Employment data from County Business Patterns, population data from the U.S. Census and other secondary data from the City and County Data Book are used in the study. Counties are combined to create close to 300 MSAs for the analysis. The study finds evidence of employment deconcentration in dense MSAs. That is, the share of employment in dense MSAs has decreased while that in less dense MSAs has increased. They also find evidence of population deconcentration in the post war period. The authors note that employment deconcentration has been stronger than population deconcentration. The summary of the findings is that dense MSAs grow slower than less dense MSAs. The same result is shown for population. From their theoretical framework, they show that rising costs of goods in dense areas lead to the overall decrease in growth as compared to less dense areas. They therefore show an inverse relation between increasing population density and employment growth. Various checks and tests are
conducted to ensure that the obtained results are not driven by measurement errors. According to Carlino and Chatterjee (2002), previous studies show a stable urban structure in terms of population. These studies, however, fail to consider the importance of employment and population density. The evidence suggests that growth processes in dense MSAs (mostly urban) are different from less dense MSAs (mostly rural). A possible reason for the observed trends is that there is a general increase in aggregate employment. Other reasons cited by the authors for their results are changes in technology, government policy, and tastes of consumers. Decreases in agglomeration economies due to cheaper cost of transportation, production innovation, and communication technologies have led to employment and population increases in small, less dense locales (Carlino and Chatterjee, 2002). Changes in people’s preferences and the increased desire of Americans for rural lifestyles could be some reasons why less dense MSAs have experienced an increase in their population. The above are some reasons why rural areas may have grown at the expense of urban areas. In a study by Beeson et al. (2001), county level population data from 1840 – 1990 is used to explain how produced and natural characteristics affect growth. The dependent variables used are the levels, densities, and growth rates of population and the independent variables are natural and produced amenities. Specific regressors include access to water transportation, different types of climate, presence of minerals, industrial mix, educational
infrastructure, and access to transportation. The Census is the source of data for their study. Beeson et al. (2001) find that in earlier decades, presence of natural endowment caused a significant increase in population for counties that had these resources. They find that human capital positively affects growth. The results also show that natural amenities such as mild climates, land area, access to water transportation, and less mountainous terrain were associated with higher populations. Counties with larger shares of employment in manufacturing and commerce had higher growth over the 150 year period. They find that population has become more concentrated in densely populated counties. Based on population density in 1840, Beeson et al. (2001) find that larger counties grew faster than smaller counties. They use nonlinear least squares to evaluate whether population has converged or diverged. Their results support the cumulative causation endogenous growth theory. In summary, they find little population convergence in the whole sample. Population divergence is also found when frontier counties are excluded from the analyses.

2.12. Fiscal Decentralisation in India

There are a number of additional reasons for the analysis of fiscal decentralisation in India. The adoption of market oriented reforms since 1991 has redefined the role of the State and this has necessitated a reexamination of fiscal arrangements between different levels of government. In fact, there have been opposing forces at work. While on the
one hand, the transition from centralized planning and market based resource allocation has enhanced the role of sub national governments in delivering social and physical infrastructure, increasing trend in regional inequalities has necessitated greater central role. Inter-regional distribution of incomes has shown increasing inequality during the 1990s (Rao, Shand and Kalirajan, 1998). There is also considerable debate on the trends in poverty with official statistics showing increasing trend in recent years. Efficient anti poverty interventions warrant a solution within the co-operative federalism framework (Inman and Rubinfeld, 1992). It must be noted that despite a decade of fiscal adjustment, fiscal imbalances at both central and State levels continue to pose serious threat to macroeconomic stability in the country. Fiscal decentralisation in a three-tier federal framework in India. After a brief discussion on the evolution of Indian federalism and the description of the prevailing system, the paper brings out anomalies in assignments between center and states and States and local bodies. Critical analysis of intergovernmental transfers brings out the efficiency and equity implications of intergovernmental transfers (Rao M.Govinda 2000). Decentralisation has administrative, political and fiscal dimensions. The three dimensions are interdependent and the effectiveness of decentralisation requires calibration of the three dimensions together. Although it is possible to deal with each of the dimensions independently, reforms in one aspect of decentralisation cannot be carried out beyond a
point unless there are accommodating changes in others. Fiscal Decentralisation implies the transfer state finance to the various departments of functions for implementing the social and economic activities in the state (A.Arulraj & Thamizselvam, 2010)

**Conclusion**

In this chapter a review of literature on fiscal decentralisation, economic growth, and welfare reform changes were discussed. The literature shows the research that has been done on decentralisation and local economic growth as well as welfare reform. The studies are relevant to this dissertation because it shows what has been done in the past, consequently strengthen the research and filled the literature gap as and when required. The methodologies, variables and hypothetical Model have been discussed in the next Chapter. This chapter helps the researcher to strengthen his argument on fiscal decentralisation in state finance of Tamilnadu.