Fiscal Policy: An Antecedent to Economic Development

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Abstract

Economic development is the imperative of every nation and more specifically developing ones. Various chronicles are recounted in the literature available on the subject pertaining to realisation of same. This paper peeks through the prism of fiscal policy which is widely recognised as means to the end. It is found that to a large extent empirical studies are consistent with the theoretical underpinnings. Pertinent to mention, the literature concerning the linkage between public expenditure and development is found digressed along the standard effects. Development is found varyingly influenced by fiscal policy due to the fact that subject variable is mediated by several other variables.

Keywords: Development, Fiscal Policy, Public Expenditure, Taxation, Economic Growth.

Introduction

Development is a dynamic, holistic and multidimensional concept whose significance varies across the time and space. Although not certified, "development" is implicitly intended as something positive or desirable. Connecting the same with the socio-economic system, development generally means betterment or improvement either in the general situation of the system, or in any of the part of which system is composed. It is a phenomenon which traverses through various sciences and several disciplines. The concept of development dates back to 19th century and has been used in several fields including natural sciences, social sciences and physical sciences (Abercrombie, Hill & Turner, 1994; Cliché, 2005). However, in the field of social sciences, the concept of development emerged during the 1950's and 1960's following the end of World War II (Harris, 2000; Hettne, 2002). Accordingly, the concept has been associated with

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many disciplines such as economic development (Schumpeter, 1911; Romer, 1986; Todaro, 2000), social development (Seers, 1969), human development (UNDP, 1990), Sustainable development (Brundtland Report, 1987; Adams, 2006), Territorial development (FAO, 2005) and development as freedom (Sen, 1999).

Post-World War II, the concept of economic development was initially confined to economic growth per se measured by increase in national per capita income. National income was taken as a proxy for other indicators of development. Among the early theorists of 1950's and 1960's, Rostow believed that development process followed a sequence of historical stages (Ingham, 1995) and investment was considered a prerequisite to the growth oriented economic development (Rostow, 1960). This growth-oriented approach of development was based on the premise that ceteris paribus, economic growth could benefit the entire society either by market driven 'trickle down' effects, or by state driven social policy (Sant' Ana, 2008). However, Harris (2000) came out with contradicting findings and challenged the trickle-down effects of growth-based development on the pretext that the benefits of development had been unevenly distributed. The income inequalities gap didn't shrink but remained persistent and sometimes stretched more over time. This approach of measuring economic development was very narrow in scope as it ignored all other important non materialistic indicators. Welfare measures such as better health care, education, shelter, eradication of poverty and inequality couldn't find any legroom in the horizon of development.

Visualizing development in terms of economic growth as a quantitative concept depicts more than that. This wave emerged in early 60's. Theorists like Lewis and Chenery at that time conceptualized development process as a structural shift. According to them, economy will grow only when there will be shift of labour from the agricultural sector to those times modern sector i.e., industrial sector. Kuznets in 1966 defined economic development as growth accompanied by qualitative changes in the structure of production and employment, generally referred to as structural change. Based on the convention of structural transformation, regarded as key to development, most developing countries were seen engaged in the reallocation of labour and diverted their full attention towards industrial sector and in consequence neglected the primary sector. The fatalities of this reckless attitude has been widely recognized (World Development Report, 2000). In late 60's, Chenery, Taylor and Syrquin acknowledged that development is possible through structural shifts but raised an important question that the underlying is itself dependent upon various factors which vary across the countries as a result of which there can't be same pattern of development throughout the globe (Todaro& Smith 2009). Later on, this shift oriented concept of development was severely criticized by Seers, 1979; Myrdal, 1971; Streeten, 1972; Chenery et al., 1974; ulHaq, 1976 on the fact that developing countries' huge population was still seen in the poverty trap, as they didn't have enough resources to fulfil their basic needs.

In 1970's the emphasis of development was angled towards the fulfilment of basic needs besides economic growth and structural shifts. This compassionate approach was proposed by Seers, Haq, Streeten and others. Eradication of poverty and malnutrition, growing income equality and increasing employment besides economic growth and structural shifts emphasized the development of a particular country (Seers, 1979). So, fulfilment of basic needs like education, nutrition, health, and sanitation were regarded as the key factors of development in addition to growth (Harris, 2000; Seers, 1969).

The Latin American financial crisis of 1980's marked a new paradigm in the history of development. Although preceding course of the concept being holistic and humanistic in nature, the debt crisis of 1980's turned away the focus of development theorist from need-based approach towards market-oriented approach, resulting into liberalizing reforms, thus integrating the national economies with the world. This structural adjustment program was undertaken in order to correct the distortions made in the past in many areas like exchange rate, prices and burgeoning Sovereign debt. This market-oriented approach was severely criticized by many theorists on the ground that although being efficient, but it doesn't address plight of the poor (Seers, 1969; Harris, 2000).

The last decade of the 20th century witnessed a new global realization of the construct development. At this time the attention of the economists diverted towards human capital from physical capital. A country was deemed to be developing if it was making any endeavor towards garnering human capital. Development was perceived as a process which created congenial environment for people, individually and collectively, to develop their full potential and to have a reasonable chance of leading productive and creative lives in accord with their needs and interests (HDR, 1990). It is the capability to function that really matters for who is poor and non-poor, logically economic growth can't be treated as an end in itself rather development has to be more concerned with enhancing the lives we lead and the freedoms we enjoy (Sen).

At the dawn of the new millennium, a new developmental wave surfaced which crafted more holistic view of development. It was for the first time that all the 189 member nations of United Nations in September 2000 recognized, in addition to their individual responsibilities, collective responsibility to uphold the principles of human dignity, equality and equity at the global level. This new version of development acknowledged the multi-dimensional nature of development and it was also unanimously accepted that only increasing the monetary benefits will not result in poverty alleviation. Development composed of eight Millennium Development Goals (MDG's) with 21-time bound targets to be achieved by September 2015.

2015 has been vowed as the landmark year for global development with big implications for international cooperation in poverty reduction, promoting prosperity and wellbeing for all, protecting the environment and addressing the climate change. On the side-lines of development, United Nations Sustainable Development Summit 2015 was held at Paris on 25th September 2015, attended by 193 UN members. Since Millennium Development Goals (MDG's) were intended to be achieved by September 2015, whose targets were deemed to be ambiguous, which couldn't materialize significantly as a result of which further process was needed to achieve the unaccomplished targets, clear the ambiguity in targets and even new goals and targets were inserted to make development all-inclusive and broad based, by addressing to the recent global issues related to climate change and environmental degradation, gender equality, increasing gaps between rich and poor, poverty and hunger etc. It was resolved and mutually agreed by all member countries to switch over to Sustainable Development Goals (SDG's) which replaced earlier Millennium Development Goals (MDG's) due to former being more collaborative globally and inclusive in targets; to harness global efforts towards all-inclusive global development. With the adoption of SDG's the theme has been now shifted from development to sustainable development. It can be reached by achieving 17 Sustainable Development Goals through 169 associated targets.

Thus, to conclude the developmental debate, it is evident from the previous paragraphs that development has become a holistic phenomenon, dealing with multidimensional issues pertaining to economy, society and environment. There are various policies which are used by the government to tread on the path of development, fiscal policy being one among them.

Fiscal Policy Instruments

Fiscal policy is the deliberate alteration of government spending or taxation to help achieve desirable macro-economic objectives by changing the level and composition of aggregate demand (AD). These alterations are carried out by the instruments which are used differently in different scenarios. First among them is the public expenditure. Public or government expenditure is that

expenditure which is incurred by the public authorities i.e., central, state and local governments to satisfy those common wants which the people in their individual capacity are unable to satisfy efficiently. Public expenditure is used to satisfy collective social wants. It reflects the decisions of legislative and executive bodies as to the field and scope of public activities and expenses. In the fiscal architecture, public expenditure serves an effective fiscal device to be used by the government to accomplish desired socio-economic goals. Much of the quality of socio-economic life enjoyed in a market-oriented but mixed political economy depends, by and large, on how the government behaves in its spending activity under the fiscal framework of the country. In the contemporary era, all economies, whether developed or developing are mixed political economies with varying degrees of government intervention in the system. As such, public expenditure is crucial in a modern fiscal framework. In fact, the government expenditure constitutes the edifice of fiscal management framework of the budgetary exercise in an economy. In the budgetary processes, the level of public expenditure is determined first and then the sources of public revenue and need for public borrowing is traced. The basic problems of developed and developing nations are however, different. The role of public expenditure, therefore, tends to differ widely in these nations. In general, public spending in developed nations is basically undertaken to check fluctuations in effective demand. In developing economies, on the other hand, public spending reflects government's aspirations, efforts, and intentions to promote economic development and accelerate economic growth, to reduce income disparities, improve overall standards of living and eradicate abject poverty in the shortest duration possible. Ostensibly, in a developing country it is the composition and pattern of public expenditure, as well as pattern of financing, rather than its mere growth in the expanding fiscal framework that is important in achieving the socially desirable objectives. In short, government expenditure has a unique role to play in developing economies such as India, which has a vision for socio-economic transformation and positioning a leading big emerging economy in the global setting into a developed country status.

Any public authority or government needs income for the performance of variety of functions and meeting its expenditure. The income of the government through all sources is called public income or public revenue which is second vital instrument of the fiscal policy. The necessity of public revenue is of course, due to the needs of public expenditure as already mentioned above. The size of public revenues is thus determined by the volume of public expenditure. The size of public revenue and the methods of obtaining it have serious repercussions on the productions and

distributions of national income and wealth as well as on the level of employment and economic activity in the country. Raising of more public revenue implies creating disutility for tax payers and thus reducing the aggregate demand which in turn pulls down the inflation, production and employment etc. The process in total thus tends to affect the social welfare adversely.

Last but not the least instrument of fiscal policy is the public debt. Public debt or public borrowing as an instrument of fiscal policy is of recent origin. As mentioned in encyclopaedia Britannica, public debt refers to "obligation of government particularly those evidenced by securities, to pay certain sums to the holders at some future date." In fact, public debt is considered when the government floats its loans and borrows from the public. Government needs to borrow at times when current revenue falls short of public expenditure. Public debt is an important source of revenue to a modern government. It is, however, an instrument for temporarily augmenting revenue of purchasing power in exchange for an obligation on the part of government to repay the principal sum borrowed plus a stipulated rate of interest on it, at a specified future date. Public debt creation is considered very significant to remedy a depression as it enables government to take up public investments without increasing taxes. It also acts as the tool to relieve the economy form the inflationary spiral.

Thus, it is evident from above that fiscal policy instruments exert a strong influence on the economy and can be used in multifarious settings to achieve macroeconomic stability and progressive growth. Now let us peek into the literature in order to assess whether empirical studies corroborate the above philosophy or not.

Review of literature

At the very outset literature concerning the linkages between fiscal policy and economic development has been segregated into two groups. First one is of theoretical nature put forward by various economists, policy makers and theorists mainly since the dawn of eighteenth century initially by classical economists like Adam Smith, David Ricardo, Jean Baptiste Say, Thomas Robert Malthus, and Thomas Stuart Mill and later on by John Maynard Keynes and others. This literature can be further categorized into two strands, one defending the free-market economy and other contending the same and endorsing interventionist polices of government. Another body of knowledge which sheds light on the association between fiscal policy and macroeconomic development is purely empirical one in the form of research papers, policy notes, working papers accomplished by various researchers, organizations and institutions across time and space. This

set of literature has its own advantages over the former one, as it addresses the practical scenarios which are different from the theoretical underpinnings besides addressing the more intricate problems. Furthermore, such body of knowledge is comparatively very precise in addressing the various macroeconomic concerns facing the society.

Theoretical Literature

On the basis of the role played by market or state in the development process, the whole literature since its inception can be broadly classified into two different and opposite divisions/classes or factions. One of the factions believes that economy can ascend to new heights of development if the market forces are allowed to work smoothly and freely without any curbs or constraints from the state. This faction is commonly known as having the capitalistic thoughts. The forerunners of this thought were Adam Smith followed by, David Ricardo, Thomas Malthus and others in the queue. These are prominently known as classical economists. Contrary to this, another faction which believes that state plays a dominant role in shaping the developmental architecture of the nation. Karl Marx is the pioneer of such faction followed by John Maynard Keynes and others in the row.

Having a brief discussion on the theoretical literature concerning economy and the role of public authorities, we shift to another body of knowledge which expounds as to how reliable these theoretical underpinnings have been in practical scenarios across the globe.

Empirical Literature

Owing to the implications of fiscal policy on macroeconomic variables, it has remained focal point for economists, academicians, researchers and policy makers. Number of studies have been steered on this important instrument of public finance worldwide. The important studies include Jouini, Lustig, Moummi and Shimeles (2018), Salotti and Trecroci (2018),Flores (2017), Odusola (2017), Lustig (2017), R. Sasmal and Sasmal (2016), Abbasali (2016), Schneider, Kinsella and Godin (2015), Bose and Bhanumurthy (2015), Hooda (2015), Bhakta (2014), Toledo and Vinieris (2014), Panizza and Presbyter (2014), Jha et al. (2014), Atenas and Klemm (2014), Arauco, Molina, Aguilar and Pozo (2014), Agasisti (2014), Jaramillo (2014), Tang et al.(2013), Gallo &Sagales (2013), Patricia and Ichikawa (2013), Grigoli and Kapsoli (2013), Simian and Ozan (2012), Surakarta (2012), Cicchetti et al. (2011), Dauda (2011), Afonso and Furceri (2010), Romer (2010), Kumar and Woo (2010), Rajkumar and Swaroop (2008), Karaitiana and Sabinene (2009), Mitchell (2005), Baldacci, Guin-Siu and Mello (2003), Verhoeven and Tiongson (2002),

Folster and Henrekson (2001), Filmer and Pritchett (1999), Mandle (1999), Miller and Russek (1993), Landau (1983) and Robinson (1977). They have analyzed different aspects of fiscal policy empirically and more importantly the impact of different fiscal policy instruments on macroeconomic variables. A brief review is presented here as under

Public expenditure and economic growth

Public expenditure deals with the principles relating to the allocation of public spending to be used by the government to accomplish desired socio-economic goals. The debate over the role played by public expenditure in the form of government consumption, public spending and transfers and subsidies in the economic growth is very contentious. R. Sasmal and Sasmal (2016) in a panel regression studied the linkage between public expenditure and economic growth by employing state level data and found that public expenditure have a significant positive impact on the growth rate of states in India measured in terms of per capita net state domestic product. Srinivasan (2013) also analyzed the causal relationship between public expenditure and economic growth in India for a period from 1973-2012 by using co-integration approach and error correction model. The co-integration results expound long run as well as short run relationship between the two thus confirming the Wagner's law of public expenditure. Furthermore, error correction model signifies one way relationship between public expenditure and economic growth, running from later to former. However, bi-directional causality was found among economic growth and public expenditure in both short and long run by Ayo, Ifeakachukwu and Ditimi (2012) while investigating connection among economic growth, public expenditure and inflation in Nigeria from 1970-2010. Besides presence of co-integration among all the three variables was also documented (Ayo, Ifeakachukwu and Ditimi, 2012). Robinson (1977) in order to unmask the channels through which economic growth of the nation is negatively affected due to economic dependence(dependence theory), carried out a longitudinal study from 1955 to 1970, comprising of both developed and underdeveloped countries of world aggregating 45 in total, which discerned positive effects of government (measured in terms of government's revenue as a proportion of GNP) on economic growth (GNP) with amplified effect found in case of underdeveloped countries. Another study was conducted by Ram (1986) to show the relationship between government size and economic growth for 115 countries over a period of two decades from 1960 to 1980 which revealed a positive effect of government size (measured as government's share of GDP) on the economic growth across time and space. Differentiating from the studies conducted

by others, Miller and Russek (1993) examined the effect of fiscal policy changes on economic growth in a systematic manner by considering the budget constraint in the cross country regression equations for developed and developing nations and concluded that generally effect of Public expenditure on economic growth was found conditioned with the financing mechanism. Tax financed expenditure was found to have positive effect on growth while as adverse was the case of debt financed expenditure (Miller and Russek, 1993). More specifically public expenditure on education, health, defense, social security and other welfare expenditures were found to have negative effect while as same was not true in case of transportation and communication (Miller and Russek, 1993). Bose & Bhanu Murthy (2015) in an attempt to estimate fiscal multipliers for the Indian economy concluded with the finding which favors the active role of government in the economy. Multiplier effect of 2.5, 0.98 and 0.99 was reported for capital expenditure, transfer payments and other revenue expenditures, which is a testimony to the positive impact of public expenditure on the economic output, capital expenditure being more productive than other revenue expenditures and transfer payments (Bose &Bhanu Murthy, 2015). To gauge the validity of proposition of irrelevance of public policies as posit by new classical school of thought, Aschauer (1989) conducted a study with respect to United States economy over a period 1949 -1985 and reported productive nature of public expenditure specifically public infrastructure of non-military nature thus signifying the importance of the presence of public sector even in such an economy with highly privatized economy. Another effort in the same direction was made by Ebaidalla (2013) for the case of Sudan over a period from 1970 – 2008 which employed granger causality test and revealed unidirectional causality among the variables running form public expenditure to Sudan's national income, thus signifying the importance of public sector in Sudan. Another investigation was carried out to shed light on various issues hovering around fiscal expansions and adjustments vis-à-vis 20 OECD countries during 1960 to 1992 which reported that increase in taxes was mostly causing adjustments whereas increase in expenditure resulted expansions quite often with the later episode mainly characterized by comparatively large increase in transfers and government wages than the decrease in the corresponding items during the former phase (Alesina & Perotti, 1995). Ducanes, Cagas, Qin and Razzaque (2006) in an empirical investigation on macroeconomic effects of fiscal policies for four Asian countries from 2006 -2010, analyzed the impact of public expenditure and taxation on their economic behavior, testified that public expenditure multipliers were positive although less than unity for both the cases of targeted as well

as untargeted category but in case of former one it was observed to be higher than the later. Furthermore, smoothing behavior of automatic expenditure stabilizers was experienced in half of the sample countries (Ducanes, Cagas, Qin and Razzaque 2006). Aarle and Garretsen (2002) in an expedition to verify the macroeconomic effects of fiscal policy in view of the fiscal adjustments employed Giavazzi and Pagano (1996) specification, in 14 countries of the EU block and reported mainly no evidence for non-standard effect of fiscal policy adjustments.

In a cross country study encompassing 104 countries, Landau (1983) analyzed the relationship between average government expenditure and average economic growth for four long periods viz, 1961-70, 1961-72, 1961-74, 1961-76 and two short periods viz, 1961-68, 1970-76, considering share of government consumption in GDP as a proxy for government expenditure rate of real per capita GDP for economic growth, illustrated significant negative impact of former on later for all countries and for all the periods except for bottom income group of 48 countries to which results were contrary. Another attempt was made by Landau (1985) in the same direction but with many developments over his earlier work like instead of taking only government consumption as a proxy for entire government expenditure, all the three components were tried for viz, government consumption, government transfers and government investment. The study was also specified in terms of its scope encompassing over 16 developed countries only for the period 1952-76 and data was analyzed by using regression technique which clearly expound significant negative relationship between government expenditure and economic growth; however causality tests were not employed due to which cause and effect link cannot be exemplified. Guseh (1997) in detour from the vast amount of literature on public expenditure and economic growth mediated the relationship through inclusion of political and economic setup prevalent in developing countries and found both the variables negatively related to each other. While including the mediating variables it was found that in non-democratic socialist countries, the association among the variables was highly negative as much as three times than in democratic socialist countries. Abizadeh and Yousefi (1998) while verifying the nature of relationship for South Korea tested for both Wagnerian and Keynesian hypothesis and established support for Wagnerian hypothesis at both two- and three-year lags. Folster and Henrekson (2001), in an econometric panel study to verify the relation between government size (measured by total government expenditure as a percentage of GDP) and economic growth for a sample of rich countries over the period 1970– 1995, concluded with a robust negative relationship between the two to the extent that a 10

percentage point increase in public expenditure ensued a decline in the growth rate by 0.7–0.8 percentage points. To appraise the linkage between government size (measured as GDP's share of government spending) and economic growth, Afonso and Furceri (2010) examined behavior of both the variables for a set of OECD and a subset of EU countries from 1970 to 2004 by employing regression technique and highlighted a negative relation between the two in both cases with a coefficient of -0.13 and -0.09 respectively. To investigate the government led growth hypothesis, Chandra (2004) examined the hypothesis with respect to Indian economy from 1950-1996, using both co-integration and causality testing, and realized non-standard effects of government in capital formation both in the short and long run and exhibited short term causality running from progression in income to public investment growth thus confirming Wagner's Law. Government consumption and economic growth were reported to be disassociated in both short run and long run (Chandra, 2004). Gallo & Sagales (2013) while probing joint determinants of fiscal policy, income inequality and economic growth, analyzed 21 high income OECD countries over a period 1972-2006, highlighted a significant negative impact of distributive expenditure on economic growth when financed by a cut in non-distributive expenditure, however, non-distributive expenditure were found having significant negative impact on the economic growth irrespective of source of financing. In order to explore the nature and direction of relationship between the increasing public expenditure and national income for the case of Indian economy over a period from 1980 to 2013, another study was carried out by Ahmad in 2014 by employing co-integration and causality tools which exhibited co-integration among the subject variables and existence of unidirectional causality running from national income to public expenditure and not the other way round, thus doesn't lend any support to the Keynesian fiscal activism rather ratifies Wagnerian income-expenditure hypothesis. In a similar fashion, another study was conducted by Olomola (2004) for the case of Nigeria over a period 1970 – 2001, using co-integration and causality test, which corroborated Wagnerian hypothesis thus indicating endogenous nature of public expenditure while as feedback loop was not recognized which implies that public sector was not having any impact on the economic growth of Nigeria. Crowding out of private investment was registered to the extent that for each additional \$1 of public expenditure, private investment declined by about \$0.32 and in addition to this negative externality was documented at 0.33% for each 1% increase in public expenditure (Fuente 1997).

In an attempt to ascertain the productivity of various services provided by the government, including educational services, Karras (1996) employed government size (government consumption as a percentage of GDP) as a mediating variable in the linkage and highlighted the productive nature of government services generally across the world, but specifically for the case of 43 African countries whose marginal productivity was less than 1, indicating that services are being provided over the optimal range, while the opposite was found for the case of 23 Asian countries, where the marginal productivity of government services was found to be greater than unity. Furthermore, public sector productivity was found to be negatively associated with the size of government (Karras 1996). An empirical analysis concerning effects of fiscal shocks was effected in the context of nineteen OECD countries by Perotti (1999) which highlighted the important role played by initial conditions in the nature and magnitude of effects on the economy due to fiscal shocks and also reported that expenditure shocks exhibit Keynesian effects at low levels of debt or deficit while as reverse was the case when economy was burdened by debt or deficit. Giavazzi and Pagano (1995) in an empirical study attempted to validate appropriateness of non-standard effects of fiscal policy changes in a sample of 19 OECD countries during 1970 to 1994 and exposed that fiscal policy adjustments through reduction in public investments as well as taxes and transfers can result in non-standard effects, due to expectations of future income from labour and capital in addition to changes in interest rates and assets values, provided that such changes are large enough and enduring.

A study on the direction of causality between government expenditure and gross domestic product of Canada over a period of 1947-1986 was carried out by Afxentiou and Serletis in 1991 which neither favored Wagnerian hypothesis nor Keynesian fiscal activism. In a similar vein yet another endeavor was made by Ansari, Gordon & Akuamoah (1997) to test the incomeexpenditure hypothesis for three African countries which didn't discern any relationship between public expenditure and national income in the long run for all the three countries, however Wagnerian hypothesis was confirmed only in case of Ghana for a short run period indicating endogenous nature of public expenditure. Bagdigen and Cetintas (2003) in an attempt to examine whether the Wagner's law holds true for the Turkish case for a period of 1965-2000, found no relationship between the two as neither public expenditure was found to have any effect on the output growth and nor was the former found to be effected by the later. Fuente (1997) investigated influence of fiscal policy instruments (public expenditure and taxes) on economic growth in a group of OECD countries and documented influence of fiscal policy on growth through three conduits. Public investment enhanced factor accumulation besides public expenditure crowded out private investment and finally government size (represented by public expenditure) was negatively associated with the level of productivity (Fuente 1997). Alesina and Ardagna (1998) in their magnum opus narrated an account of fiscal adjustment emanating from spending cuts and/or taxation increase, for the matter of OECD countries, effected over the period 1960 -1994 and investigated both the expansionary and contractionary behavior of fiscal consolidation, thereby found composition of consolidation significant in explaining the behavior and expansionary nature of expenditure driven consolidation notwithstanding initial level of debt.

Public expenditure and educational outcomes

In comparison to the foregoing literature, literature pertaining to spending on education is not digressed. Nonetheless, there is still a large body of literature which have examined the same due to its significance in nation building. Some of the studies reviewed follows the suit. Baldacci, Guin-Siu and Mello (2003) conducted an empirical investigation on the nature and type of relationship between public spending and education which encompassed 94 developing and transition economies over a period of 1996 to 1998 and established on the basis of the results derived from covariance structural model that there was a significant positive association between the two variables with elasticity of 20 percent. To explore the linkage between social spending and human capital, Baldacci, Clements, Gupta and Cui (2008) studied the subject matter in 118 developing countries covering the period 1971 - 2000 and concluded with the significant positive relationship between the two to the extent that increase in education spending by 1 percentage point of GDP was associated with 6 percentage point increase in enrolment rates in the current five year period and another 3 percentage points in the following period. In a similar vein Gupta, Verhoeven and Tiongson (2002) conducted a cross sectional study comprising of 50 developing and transition economies and on the basis of regression results it was established that both the level as well as the composition of public spending matters for educational attainment. More precisely, a 5 percentage point increase in the share of primary and secondary education expenditure in total public spending on education was coupled with increase in gross secondary enrolment rate by over 1 percentage point and an increase in total spending on education by 1 percentage point of GDP was linked with more than 3 percentage point increase in gross secondary enrolment (Gupta, Verhoeven & Tiongson, 2002). Dauda (2011) studied the subject matter in the Nigerian state over

a period 1975-2007 and found significant positive impact of public spending on educational outcomes measured by adult literacy rate thus signifying the importance of role of government in developing human capital. In a similar fashion, Bhakta (2014) researched influence of public spending on educational achievement by employing Gross Enrolment rate, Net Enrolment rate, Dropout rate as proxies for educational achievement and developed simultaneous equation model to exhibit the linkage between educational attainment and public spending. Public spending on education has been found to have a significant impact on all the proxies of educational attainment and in addition to this, bad health status surrogated by infant mortality rate made the linkage between public spending and educational attainment fragile in terms of lower enrolment and dropout rates (Bhakta, 2014). Whether allocation pattern of government education spending in early and late childhood has any relation with the outcome variable or not, a study to this effect was conducted by Abington and Blankenau (2013) by including the agents properties (only income). High and balanced spending across the hierarchy (early and late childhood) was found instrumental in maximizing output globally with government expenditure crowding out private expenditure (Abington & Blankenau, 2013). In 2005, Herrera and Pang conducted similar study using Free Disposable Hull (FDA) and Data Envelopment Analysis (DEA) techniques for a sample of 140 countries, employed both the single input output and multiple input output models, their results characterised the efficient nature of spending in both models ranging on an average from 0.7 to 0.9. Similar arguments were made by Afonso and Aubyn (2005) while analyzing the efficiency of education for a sample of OECD countries using quantity inputs like total intended instruction time in public institutions in hours per year for the 12 - 14 years old and number of teachers per student in public and private institutions for secondary education, while as output for the same was quantified in terms of Performance by 15 years old on PISA reading, mathematics and science literary scales (simple average of three). The education efficiency scores derived from two non-parametric techniques namely Data Envelopment Analysis (DEA) and Free Disposal Hull analysis varied from 0.844 to 1.000 under FDH technique and 0.841 to 1.000 under DEA technique signifying the compatibility among the techniques (Afonso and Aubyn 2005). Applying resultoriented approach for the management of budgetary resources by using amount spent in 2008 per six- to fifteen-year-old learner as input variable and learners' achievement in terms of their PISA (Programme for International Student Assessment) scores in 2009 as output variable, Batare

(2012) probed the European Union states and proposed positive correlation between the above variables to the tune of 71%.

Rajkumar and Swaroop (2008) outlined imperative nature of governance in the linkage between public spending and education outcomes by elucidating that one percentage point increase in share of public education spending in GDP resulted into decrease in primary education failure rate by .70 in countries with good governance, while as no visible impact was noticed in their counter parts (countries with weaker governance). Similar attempt was made by Suryadarma (2012) in the context of Indonesia which also reported a strong meddling of corruption in the linkage between the spending and outcomes in education sector. Hanushek (1995) argued that across the globe, inefficient policies have been chased which are aimed at employing more and more inputs in order to derive the desired outputs. He retorted that policies oriented towards performance incentives rather than inputs appear to be viable alternatives. While addressing the problem of raising quality of education in developing nations, Fuller (1985) contended that education expenditure should be prioritized first towards the maintenance of quality, besides enrolment score should also be targeted but not at the cost of quality education, resulting into inefficient utilization of funds, which has been the past trend as demonstrated in the reviewed literature.

In order to address important question that whether social spending by public authorities really helps in improving the human capital of the nation, Iheoma (2012) solved mystery for the case of three developing countries of West Africa namely Nigeria, Ghana and Senegal, revealed that education expenditure doesn't prove worthwhile in improving human development index across the sample. Another study in the same direction was carried out by Iheoma (2014), although wider in scope than earlier one encompassing twenty Sub-Saharan African countries, which signified weak link between primary and secondary education expenditure was associated with an improvement of 0.2 percentage increase in tertiary education expenditure was associated with an improvement of 0.2 percentages in human development. Abbasali (2016) in an attempt to gauge out the effectiveness of public education expenditure and educational outcome measured by school enrolment rate. Similarly attempt was made by Jayasuria and Wodon (2007) in twenty-four provinces and thirty-two states of Argentine and Mexico where they found that time and adult literacy rate were statistically significant while as per capita GDP and per capita spending did not

have statistically significant impact on net primary enrolment rates and net secondary enrolment rates however, significant impact of per capita GDP and adult literacy on test scores was reported. Afonso, Schukneckt and Tanzi (2004) also joined the race, comparing performance and efficiency of public sector for 23 industrialized countries, reported significant differences in public sector efficiency, drawn by weighing performance with the resources utilized, across countries and small governments (based on percentage of GDP spending) leading in efficiency scores, thereby suggested diminishing marginal products of higher public spending. To uncover the nexus between money employed on education and the relative outcomes, an endeavor was also made by Flores (2017) in the context of European countries which failed to discern any solid relationship between the subject variables rather some countries were found efficient (Poland, Slovenia and Czech Republic), while others were found inefficient in using the education resources (Norway and Sweden) and in between them some countries (Denmark, Germany, Finland, Belgium, Netherland, Ireland and Switzerland) qualified as effective only implying garnering the results and the high usage of inputs. Another effort was made in the same direction by Agasisti (2014) for 20 countries of European Union during the period 2006 to 2009 which unmasked that efficiency scores were not associated with the spending as few countries were found more efficient despite little spending and some others were found inefficient although much was spend on the education.

Public expenditure and health outcomes

Akin to literature of education spending, present dispensation is also found relatively cohesive in its prescription, although these probes are heterogeneous in their structure, methodology, time and space. Moreover, sample space across the whole strand mostly underscores the significance attached to health factor by the advanced nations. Let's explore the same. Baldacci, Clements, Gupta and Cui (2008) in an attempt to explore the linkage between social spending and human capital investigated the matter for the case of 118 developing countries and exhibited the significant positive relationship among the two to the extent that increase in health spending by 1 percentage point of GDP was associated with 0.2 percentage point rise in the under-5 child survival rate. Similarly, Gupta, Verhoeven, and Tiongson (2002) conducted a cross-sectional study of 50 developing and transitioning economies and discovered that the level of public spending matters significant in explaining the change in the endogenous variable. Precisely speaking, one percentage point increase in the total public health expenditure was linked with decrease in infant and child mortality rates by about three per thousand live births (Gupta, Verhoeven & Tiongson, 2002). Another expedition was led by Iheoma (2012) to address the important issue, whether social spending by public authorities really aids in improving the human capital, for the case of three developing countries of West Africa namely Nigeria, Ghana and Senegal which substantiated human capital theory as one percent increase in current health spending was associated with an average one-third increase in human development while as lagged effect was found to be 0.4 respectively for both in short and long run. Again Iheoma (2014) experimented the human capital theory with a wider sample consisting of twenty Sub-Saharan African countries and confirmed efficacy of social spending on human capital development with one percentage increase in health expenditure, human development improved by one by fifth times on an average. In 2005 Herrera and Pang conducted an inquiry to measure the efficiency of public spending for a sample of 140 countries by employing both the single input output and multiple input output models which discerned that spending was efficient in both the models ranging on an average from 0.7 to 0.9. Unlike using monetary inputs, Afonso and Aubyn (2005) employed quantity inputs like number of doctors, nurses and inpatient beds per thousand habitants to measure its effect on output measured in terms of infant survival rate and life expectancy and revealed that health output efficiency scores ranging across the sample from 0.946 to 1.000 under FDH technique and 0.892 to 1.000 under DEA technique.

While unmasking the hopes and fears of policy changes towards health for the Indian state, Hooda (2015) analyzed the change in health spending viz a viz level, composition and variation, as a result of change in health policies and macroeconomic conditions of India and concluded with the fascinating outcome that health spending was found dominated by out of pocket costs to the extent of 71 percent of total spending thereby indicative of the fact that better health outcomes can't be bargained at lower public health spending. While departing from the existing literature by considering private health expenditure, Aisa, Clemente and Peso explored the relationship between the public health spending and longevity in a panel study, settled on a positive note although not homogenous, with superior effect of spending on longevity when the former hovers around 7 percent of GDP and highest influence was evidenced till the ratio of private public expenditure remains below 50 percent. In 1999 a cross national study was carried out by Filmer and Pritchett which suggested that public spending was marginally effecting health outcome while as socio economic factors like income, female education, inequality, ethno linguistic differences and Muslim predominant population were found to have profound impact on the health outcome. Abbasali (2016) in an attempt to gauge out the effectiveness of public expenditure on health in Azerbaijan carried out an investigation which revealed negative connection between public expenditure and health outcome, measured in terms of life expectancy and mortality rates (under 5 as well as infant), but income level was supporting the health sector outcomes. While analyzing the efficiency of public health care system in 30 European Countries by using inputs as number of radiotherapy units per 100000 inhabitants, public expenditure as a percentage of Gross Domestic Product (GDP), and number of hospital beds for 1000 inhabitants while as incidence of tuberculosis, the number of deaths by ischemic diseases per 100000 inhabitants and health adjusted life expectancy (HALE) were used as output variables, Asandului, Popescu and Fatulescu (2015) identified eight countries on the efficiency frontier while as for the rest of the cases, inefficient health system was observed. According to Asandului et al. (2015) an increase in education achievement measured by literacy reduces the inefficiency score by 6.5% thereby endorsing an increase in spending on education, directed at the uneducated segment of the society, for the purpose of higher efficiency in public health.

In detour from the vast amount of related literature, Baldacci, Guin-Siu and Mello (2003) conducted an empirical investigation on the nature and type relationship between public spending and health, encompassing 94 developing and transition economies over a period of 1996 to 1998, using latent variable model, which explicated positive impact of public spending on health outcomes but was found statistically insignificant. In a panel study encompassing 20 Indian States over a period 2003-2011, Bhakta (2014) researched influence of public spending on health status proxied by Infant Mortality rate concluded that public spending on health does not prove to be significant to ameliorate health condition of the children in terms of decreasing their infant mortality rate. Besides increased expenditure through the channel of Supplementary Nutritional Programme (SNP) was found statistically significant as it facilitated basic nutritional requirements of the children which drastically reduced the infant mortality rate (Bhakta, 2014). An empirical investigation was carried out by Rajkumar and Swaroop (2008) to eloquently ascertain the role of governance over the efficacy of public spending, which discerned critical character of governance as one percentage point increase in the share of public health spending in GDP was associated with a decrease in under-5 mortality rate by 0.32% in countries with good governance, 0.20% in countries with average governance, and had no impact in countries with weak governance.

Filmer and Pritchett (1999), in an empirical cross-national investigation explored the factors which have bearing on the health outcomes measured by infant and under-5 mortality rates concluded that public spending on health has a positive impact on health outcomes but the magnitude of impact is negligible as income, education and social factors account for 95% of under-5 mortality rate across 104 countries. In detour from most of the studies, that have employed non parametric techniques, an analysis on the efficiency of public spending for a sample of 80 developing economies across the globe spread over the first decade of twenty first century i.e., 2001-2010 was endeavored by Grigoli and Kapsoli (2013) wherein they acknowledged the fact that health sector output is a function of various socioeconomic determinants besides public expenditure. At the current spending levels, by virtue of shifting form the existing poor practices to the best practices for the case of lowest quartile of the sample, efficiency in terms of life expectancy could be increased up to almost five years, besides at the existing practices life expectancy would only increase by two months provided spending on health is accelerated by 10 percent (Grigoli & Kapsoli, 2013). To gauge out the efficiency in health outcomes measured in terms of infant mortality rates and child mortality rates, a study encompassing 24 provinces and 32 states of Argentine and Mexico respectively was conducted by using the input variables as per capita GDP alone, (proxy for level of income) and with per capita health expenditure (proxy for state/provincial level of supply of services), Adult literacy (proxy for willingness, knowledge and ability of parents to provide adequate nutrition and health care to their children), access to public hospitals, vaccinations, portable water, and time; it was found that per capita GDP, time, adult literacy rate, access to vaccination, public hospitals and portable water have statistically significant impact on both the outcome variables for at least one country or both of these (Jayasuria & Wodon, 2007). To compare the performance and efficiency of public sector for 23 industrialized countries, Afonso, Schukneckt and Tanzi (2004) conducted a cross country study, by using Infant mortality and life expectancy proxy for health indicator, explicated significant differences in public sector efficiency, drawn by weighing performance with the resources utilized, across countries and small governments (based on percentage of GDP spending) leading in efficiency scores than the rest of the industrialized countries thus suggesting diminishing marginal products of higher public spending.

Public revenue and economic growth

In an econometric panel study Folster and Henrekson (2001) verified the connection between government size (measured by total taxes as a percentage of GDP) and economic growth for a sample of rich countries using OLS and weighted regression concluded with highly significant negative effect of former on later. Romer and Romer (2010) in an empirical study while investigating the reasons of tax changes and their impact on output growth in the United States, identified two types of tax changes viz., endogenous and exogenous, former ones being characterized by tax actions brought to offset developments that would cause output growth to differ from normal while as others were taken to raise the normal growth, examined only the later set and found to have negative large effect on growth to the extent that one percent increase in taxes was having consequential effect of decline in GDP by nearly three percent and the effect was found to be robust for various checks. To characterize the dynamic effect of government taxes on output, Blanchard and Perotti (2002) employed structural VAR approach in the United States postwar period and stated results in confirmation with the Keynesian thesis that government taxes exert a negative influence on the output. An empirical analysis highlighting the effect of fiscal shocks on the economy in the context of nineteen OECD countries was crafted by Perotti (1999) which reported that at low levels of debt or deficit, revenue shocks exhibited Keynesian effects while as reverse was the case when economy was burdened by debt or deficit. Ducanes, Cagas, Qin and Razzaque (2006) in an empirical investigation on macroeconomic effects of fiscal policies for four Asian countries from 2006 -2010 found that tax multiplier was positive albeit lesser than public expenditure Furthermore, smoothing behavior of automatic tax stabilizers was experienced only in one case out of the four. Aarle and Garretsen (2002) in an expedition to verify the macroeconomic effects of fiscal policy, employed Giavazzi and Pagano (1996) specification, in 14 countries of the Economic and Monetary Union block reported mainly no evidence for nonstandard effect of fiscal policy adjustments. With the exception of government consumption that too in short run, all other changes viz., taxation and transfers evidenced absence of non-linear effects on private spending. Deliberating on the chronicles of fiscal adjustment that took place in OECD counties during 1960 – 1994, Alesina and Ardagna (1998) probed both the expansionary and contractionary behavior of fiscal consolidation and found the composition of consolidation focal in explaining the behavior, besides tax driven consolidation was found to be nonexpansionary

Miller and Russek (1993) examined the effect of fiscal policy structures on economic growth, considering the budget constraint in the cross-country regression equations, and revealed that corporate income tax, other tax and non-tax revenues were stimulating growth while as individual income tax, social security tax, domestic goods and services tax and international trade tax were impeding the national growth. In an attempt to validate appropriateness of non-standard effects of fiscal policy in a sample of 19 OECD countries during 1970 to 1994, Giavazzi and Pagano (1995) established on the basis of regression results that fiscal policy changes can result in non-standard effects provided that such changes are large enough and enduring. Moreover, fiscal adjustments exhibited such effects through reduction in public investments as well as taxes and transfers and were routed through expectations of future income from labor and capital in addition to changes in interest rates and assets values (Giavazzi and Pagano, 1995). A comprehensive survey of the existing literature on the nexus between fiscal policy and long run growth, based on the conceptual framework endorsed by Musgrave in 1959, was carried out by Tanzi and Lee (1997) which reported a fragile relationship what the theory argues for i.e. negative relationship between taxation and growth. To shed light on various issues hovering around fiscal expansions and adjustments vis-à-vis to 20 OECD countries during 1960 to 1992 wherein only those actions were investigated which qualified as discretionary changes, study reported that increase in taxes was mostly causing adjustments, besides asymmetrical behavior of taxes was observed in adjustments and expansions as personal and corporate income taxes increased largely during adjustments while as expansions were characterized largely by decrease in indirect taxes and corporate income taxes. (Alesina & Perotti, 1995)

Public revenue and income inequality

Gallo and Sagales (2013) while probing joint determinants of fiscal policy, income inequality and economic growth analyzed 21 high income OECD countries over a period 1972-2006 and exhibited a negative effect of direct taxes on the income inequality thus reflecting the presence of progressive tax structure in the observed countries, however, in case of indirect taxes, no significant effect was observed. Friedl, Gorlich, Horn, Krieger-Boden and Lucke (2015) addressed various challenges of European welfare system including inequality in disposable income, compared inequality before welfare measures, taxes and transfers etc. with post operation scenario and realized Inequality, measured through Gini Index, was largely controlled through progressive taxes, transfers and public provision of goods, besides Sweden's Nordic type welfare system, characterized by active stance of fiscal policy, had outperformed other countries by bridging the inequality gap from 0.43 to 0.26 on Gini index. Journard, Pisu and Bloch (2012) also analyzed the role of taxes and transfers in tackling income inequality for OECD countries, documented redistributive impact of taxes and transfers, in so far as inequality after taxes and transfers was observed to be on average 25% lesser than the inequality existing before advocating taxes and transfers, moreover cash transfers accounted for three quarter of the redistributive impact while as remaining quarter impact was caused by taxes. In a bid to evidence the redistributive behavior of fiscal policy in developed and developing countries IMF (2014) characterized the active role of fiscal policy in achieving the redistributive dividends and increased coverage of personal income taxes was associated with more efficient in re-distribution. Addressing the inequality concerns in developed and emerging economies IMF (2017) found direct taxes and transfers effective in tackling income inequality in developed states, with an average reduction of one third, inclusive of three quarter decline attributed to transfers besides little scope for such fiscal distribution was observed for emerging economies, thereby indicating lower progressive taxation and little spending along with the greater footing on indirect taxation mainly consumption taxes. Bastagli, Coady and Gupta (2012) also reported that fiscal policy measures, comprising of progressive taxation and highly redistributive transfers, were instrumental in getting the rid of income inequality to a larger extent although the pace has slowed due to narrowing of redistributive spending and waning progressivity of income taxes since mid-1990's. Another study appraising the effect of social spending and taxes on the economic redistribution in Uruguay carried out by Bucheli, Lustig, Rossi and Amabile (2014) concluded that inequality was largely bridged, together by direct taxes and social spending, however inequality was no way affected by imposing indirect taxes but it duly increased moderate and extreme poverty. Jaramillo (2014) also found fiscal policy instrumental in curbing the inequality and poverty although the effect was found small in the instant case not due to its inherent nature rather because of lower level of instrumentation via spending and taxes and moreover, progressive nature of direct taxes was evidenced, having more equalizing effect in urban areas than in rural ones, with little effect in inequality but indirect taxes were found neutral due to informality assumption. Investigating the role of taxes in reducing the income inequality for the case of US, Burman (2013) concluded that inequality was significantly curtailed by the federal taxes although degree of progressivity has varied over time. In a similar vein, Scott (2014), while investigating the redistributive impact of the fiscal system in Mexico,

revealed that inequality was reduced by around 15–16 percentage points jointly by taxes, transfers, and subsidies, besides direct taxes and direct transfers, which were found to be accommodative in reducing inequality only by around a quarter of the total documented effect. Arauco, Molina, Aguilar and Pozo (2014) also acknowledged the redistributive role of fiscal policy although the effect was found fragile due to peculiar revenue structure of Bolivian economy characterized by indirect taxes only. Salotti and Trecroci (2018) also reported the impact of tax revenues in bridging income inequality however, the effect observed was benign. Comparing tax contributions of the affluent class with the modest ones, Wanjagi and Ondabu (2018) also reported that taxation has bridged the gap between the rich and poor in Kenya and observed that the contribution of former class has increased from three times to hundred times from 1988 to 2017 although still a need to be done. In an attempt to measure the effect of fiscal policy on income redistribution in 29 lowand middle-income countries Lustig (2017) also explicated that direct taxes were equalizing across the sample while as net indirect taxes were found equalizing in 19 out of 29 countries. Using fiscal incidence approach, Jouini, Lustig, Moummi and Shimeles (2018) found that personal income taxes and social security contributions have profound impact in attenuating inequality in Tunisia. Another study conducted by Lustig, Pessino and Scott (2014) in six Latin American countries also revealed equalizing effect of direct taxes and cash transfers although in former case impact is subtle due to undersized nature of direct taxes as a percentage of GDP.

In a bid to verify the redistributive character of income tax in developing countries, Bird and Zolt (2005) explored the matter and concluded that inequality has been least affected by taxes and besides this there are various efficiency costs attached to later because of which broad based VAT was recommended to fund the government programs. Odusola (2017) also examined the distributive character of fiscal policy in African countries wherein most of the African countries with fiscal space (revenue to GDP ratio) of 20 percent and above were found trapped in inequality with a Gini coefficient of 0.5 or more because of misdirected spending, despite the regressive nature of taxes. Paulus et al. (2009) also analyzed the distributional impact of fiscal policies in 19 countries of European Union and found that Income inequality was substantially affected due to taxes and social benefits although heterogeneity in impact was observed across the sample. OECD (2012) examined the role of taxes and transfers in reducing income inequality and growth in its member states and established that across the sample attenuation in income inequality to the tune of three quarters was attributed to cash transfers viz. pensions, unemployment and child benefits and the remaining quarter was effected by taxes lead by personal income tax. Cevik and Correa-Caro (2015) also deliberated on the growing income inequality in China and thirty other emerging market economies from 1980 to 2013 and reported significant effect of taxation on income inequality despite the fact that Chinese tax system was dominated by indirect taxes. While exploring chicken-and-egg ruminations with reference to income inequality and tax progressivity, Slemrod and Bakija (2000) found, public choice models inconclusive as surge in taxes was not attributed to amplification of income disparities besides it was argued that inequality was fired up in 1980's and augmented in mid-1990s due to globalization and skill based technological change and to arrest the same increase in tax progressivity was advocated on the basis of standard models reviewed. In a bid to test the effectiveness of monetary and tax policy in combating Japans growing inequality since first quarter of 2001 till third quarter of 2017, an empirical study was carried out by Taghizadeh-Hesary, Yoshino and Shimizu (2018) which acknowledged that Japan's growing inequality has been controlled and curtailed by the progressive tax system prevailing in Japan. Avi-Yonah (2014) while addressing inequality scenario for American economy established that despite the progressive nature of income tax it was having subtle effect in creating egalitarian economy and to arrest the same VAT was advocated with exempting the basic necessities, rather than increase in tax progressivity due to fear of tax avoidance, trading off labor with leisure and emigration to low tax jurisdictions. Schneider, Kinsella and Godin (2015) in an empirical analysis to verify the association between fiscal consolidation, materialized in 12 European countries as a remedial measure to cure ills of financial crisis of 2008, and income inequality expounded positive association between the two-implying surge in inequality as result of growing taxes and slashing welfare measures.

Conclusion

From the above it can be drawn that by and large empirical findings are consistent with the theoretical underpinnings. Barring few studies; fiscal policy proves to be a versatile tool for spurting the development process in the country if used sensibly. Comparatively public revenue elicited standard effects of fiscal policy more often than public expenditure. Pertinent to mention here that literature concerning the linkage between public expenditure and development was found digressed along the standard effects. Furthermore, development was found varyingly influenced by fiscal policy due to the fact that subject variable was mediated by several other variables.

Moreover, generalization about the prescriptions of fiscal policy cannot be made rather each scenario/ problem requires specialized background check before prescribing the policy capsule.

Research Gaps/ Future Research

It is explicitly clear that various issues related with fiscal policy has been extensively and intensively debated, discussed and analyzed. More specifically the linkage between various instruments of fiscal policy and measures of economic development has been explored. Notwithstanding, the large chunk of literature, there is still a scope to carry out investigation in the same direction. The main driving forces in this regard are as under:

- 1. Most of the studies reviewed were carried out in cross country setting. However, it is pertinent to mention that countries differ in their structure; be it political, economic or social. This view of heterogeneity is also endorsed by Miller and Russek (1993). Following this one may assume that either these differences, factor in the growth determination, are randomly distributed and set off with total effect size of zero or they do not enter into regression equation of growth. This assumption was taken as a base by Feder (1983), Landau (1983, 1985, 1986), Kormendi and Meguire (1985), Ram (1986), Grier and Tullock (1989), Ed-wards (1989), Barro (1990, 1991, 1992), Barth and Bradley (1988), Romer (1990), Levine and Renelt (1992) and Karras (1996). However, in case variations among countries are not randomly distributed, all the studies so carried run out of order. With this background, it is wise to account for structural differences in case of cross country study. Moreover, from the practical point of view, one may endorse that policy specifications cannot be generalized given the presence of structural variations in countries rather a prudent view will be to go for time series study individually for different countries.
- 2. For the most part of the literature, it has been observed that researchers have taken disaggregated view of the relationship between fiscal policy instruments and measures of economic development as a result of which the overall impact of fiscal policy on economic development remains unexplored which was also reinforced by landau (1985). Therefore, an aggregated study is required to plug the gap.
- **3.** Despite the fact that economic development is the central issue for all economies rather than developed ones (which worry for economic growth only), almost all of the studies which have explained ways and means of achieving economic development are centered towards developed states (Alesina & Perotti 1995; Landau 1983, 1985; Afonso & Furceri,

2010; Gallo &Sagales, 2013; Perotti 1999; Giavazzi & Pagano, 1995; Afxentiou & Serletis, 1991; Fuente 1997; Aschauer 1989; Ebaidalla 2013; Alesina & Ardagna, 1998; Folster & Henrekson, 2001; Bagdigen & Cetintas, 2003; Afonso & Aubyn, 2005; Rajkumar & Swarop, 2008; Jayasuria & Wodon, 2007; Afonso, Schukneckt & Tanzi, 2004; Batare 2012; Flores 2017; Agasisti 2014; Aisa, Clmente & Pueyo,n.d; Filmer & Pritchett, 1999; Asandului, Popescu & Fatulescu, 2015) leaving almost negligible studies addressing the issue with reference to developing nations and among whom a few pertain to the Indian economy (Bhakta 2014; Sasmal & Sasmal, 2016; Srinavasan 2013; Bose & Bhanumurthy, 2015 Chandra 2004). Same concerns were also expressed by Ducanes, Cagas, Qin and Razzaque (2006). In view of this, more efforts should be focused towards developing nations.

- 4. Given the fact that fiscal policy instruments have bearing on the overall development of a nation rather than economic growth only, much of the literature reviewed is aimed at verifying the relationship between public expenditure and economic growth only (Sasmal & Sasmal ,2016; Srinavasan 2013; Ayo, Ifeakachukwu & Ditimi, 2012; Rubinson 1977; Ram 1986; Miller & Russek, 1993; Landau 1983, 1985; Guseh 1997; Abizadeh & Yousefi, 1998; Folster & Henrekson, 2001). Furthermore, in many of the cases public consumption is taken as a proxy for overall public expenditure leaving behind other two components viz, public investments and transfer payments.
- **5.** Besides this most of the studies conducted assumed data to be stationary and employed regression technique for data analysis. Under such circumstances it becomes very hard to rely on results of such studies as there are chances of spurious regressions.

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