ISSN: 2583-6285 ***Volume 3, Issue 3; June 2024***

INTERNATIONAL JOURNAL OF RESEARCH AND ANALYSIS IN COMMERCE AND MANAGEMENT

Web: https://www.iarj.in/index.php/ijracm/issue/archive

2. Effectiveness of Public Expenditure and Economic Growth and Employment in Tamil Nadu

Dr. T. Balasaravanan

Associate Professor, Department of Economics,
S.I.V.E.T College, Gowrivakkam, Chennai.

ABSTRACT:

Public expenditure on human capital is a key determinant of economic growth. Strategic investments in education, healthcare, and skills development can lead to a more productive, innovative, and healthier population, thereby fostering sustained economic development. However, the effectiveness of this expenditure is contingent on factors such as the quality of spending, equity considerations, and the alignment of education with labor market needs. The study examined the public expenditure on human capital and economic growth. The study has taken Tamil Nadu for analysis. The results indicated that human capital investment entails significant impact on human development indicators directly supplemented to the economic growth through the sound human capital.

KEYWORDS:

Public expenditure, Human capital, education.

Introduction:

Public expenditure is an important fiscal tool at the disposal of government to optimize the social welfare of the community and to promote growth with equity in an economy. The market is unable to deliver things in the ideal quantities and at competitive pricing in a free market economy. Up until the 20th century, the state's powers were restricted. As a result, public spending was not prioritized over public earnings. When revenue increased above what was required to cover the costs of upholding law and order, it was considered undesirable. The way that people think about the role of the government has changed significantly in the contemporary age due to the government's obsession with social schemes. Therefore, it is imperative that the government take an active role in developing social infrastructure and providing social services such as employment, healthcare, education, and industrial growth. As a result, during the 20th century, government spending grew dramatically. As a result, there is now more interest in studying governmental spending. Prof. Musgrave argued that public spending ought to be unrestricted in order to handle a variety of routine tasks including resource allocation, redistribution, and

stabilization. In order to promote saving and capital accumulation, public spending is very important. According to Stieglitz, government intervention has the ability to raise living standards in every situation where there are knowledge gaps, insufficient competition, or inadequate markets. In essence, he sees the government's responsibility in creating the physical, financial, educational, technical, environmental, and social infrastructures as part of the economy. This is consistent with the three functions of government proposed by Musgrave namely: allocation, distribution and stabilization.

Effectiveness of Public Expenditure on Economic Growth:

India has a complicated link between public spending and economic development that is influenced by a number of variables, such as the makeup of public expenditures, the effectiveness of public administration, and the general state of the economy. Both good and negative impacts on economic growth may be attributed to public spending, and the success of such spending frequently depends on how well it is targeted and carried out. Public investment in transport, ports, and electricity generation can boost economic expansion. Reducing transaction costs, increasing productivity, and drawing in private investment are all possible with improved infrastructure. Education and healthcare spending may support the development of human capital, which is essential for sustained economic growth. A healthy, educated workforce fosters innovation and productivity.

To maintain budgetary restraint, India has put the budgetary Responsibility and Budget Management Act into effect. Macroeconomic stability may be produced via prudent fiscal policy, which will promote long-term economic growth. When putting policies and programmes into action, public administration efficiency is essential. Corruption, red tape, and bureaucratic obstacles can make public spending less efficient. Economic growth may be impacted by the manner in which taxes are collected by the government. Positive outcomes may result from a thoughtfully constructed tax structure that encourages investment and entrepreneurship. The field of economic research that aims to explain the observable pattern of government expenditure and its variations over time is the "positive aspect" of public expenditure. It addresses the empirical validation of different theories and development models of public spending.

For example , Wagner's 'Law of increasing State activities', Peacock and Wisemans hypothesis of the 'Displacement effect', Colin Clark's critical limit hypothesis, Baumol's 'Productivity-Lag hypothesis', Rostow's and Musgrave's development model and several empirical studies that were undertaken by various Economists to test the aforesaid hypotheses fall within the ambit of this aspect . Adolph Wagner, the famous German political Economist hypothesized a functional relationship between the growth of an economy and the relative growth of its public sector activity. Wagner referred to this as the "law of increasing extension of State activity. On the other hand, excessive governmental debt might discourage private investment and raise interest rates, which would be detrimental to economic expansion. It is imperative that the government exercise responsible management of its debt levels. The efficiency of public spending in fostering economic growth may be influenced by trade policy, geopolitical issues, and global economic conditions. Outside forces outside India's control also have an impact on the country's economic progress. Several factors determine how well public spending in India stimulates economic growth. To optimize the benefits of public spending, prudent fiscal

management and governance must be combined with strategic investments in infrastructure, healthcare, and education. Making constant improvements to public administration's effectiveness and openness is also essential to guaranteeing that resources are used efficiently.

Public Expenditure Economic Growth and Employment:

Public spending is essential to a country's ability to thrive economically and create jobs. To foster an environment that is conducive to economic growth and the production of jobs, governments contribute cash to a number of areas, including infrastructure, healthcare, education, and research and development. Through promoting investment and aggregate demand, public spending acts as a catalyst for economic growth. Government investing on transportation infrastructure roads, bridges, and public transportation—improves productivity overall, increases connectedness, and lowers transportation costs. Through luring in private capital and promoting regional integration, these investments not only generate jobs right away but also support long-term economic growth. Public spending on healthcare and education also contributes to the development of human capital, which is necessary for long-term economic success. Education expenditures support the development of literacy, numeracy, and skills, which raise worker productivity and enable technical breakthroughs. In a similar vein, investing in healthcare improves worker productivity, lowers absenteeism, and fosters general wellbeing, all of which lead to a population that is healthier and more productive. Moreover, public spending on research and development (R&D) promotes technical advancement and innovation, which boost productivity and competitiveness in both domestic and international markets. Government-funded R&D programmes promote cooperation between academic institutions, business, and research centers, which results in the creation of novel goods, procedures, and technological advancements that promote economic expansion and high-quality employment.

Role of Public Expenditure in Employment Generation:

By fostering work prospects and assisting labor market reforms, public spending is essential in combating unemployment and underemployment. For example, development, maintenance, and operation of government-funded infrastructure projects necessitate a sizable labor force, creating job opportunities for both skilled and unskilled individuals. Furthermore, investments in fields like social services, healthcare, and education generate jobs in social work, teaching, and healthcare delivery, which supports the expansion of the labor force as a whole. Public spending initiatives that support marginalized populations young people, women, and people with disabilities, for example also contribute to inclusive growth by lowering inequality and increasing access to social safety nets and employment opportunities. Weak institutional capacity, bureaucratic red tape, and lack of transparency often impede the efficient allocation of resources and the implementation of development projects, hindering economic growth and exacerbating social inequalities. To address these challenges, governments need to strengthen governance frameworks, enhance accountability mechanisms, and promote greater transparency in public financial management. Social safety nets, such as cash transfers, job training programmes, and unemployment benefits, lessen the negative effects of structural shifts in the economy and guarantee that people and families can fulfil their basic requirements and engage in the

labour market. Although public spending has many potential advantages, there are a number of obstacles and limitations that could reduce its ability to stimulate employment and economic growth. Fiscal sustainability is one of the main issues since excessive government spending can result in debt accumulation, inflationary pressures, and budget deficits, all of which threaten macroeconomic stability and long-term growth prospects. The impact of investment programmes and service delivery can be undermined by inefficiencies, corruption, and mismanagement, which presents another challenge to the quality and efficacy of public spending. Furthermore, the alignment of policies and priorities across various sectors and levels of government determines how well public spending promotes employment and economic growth. Split decision-making, conflicting mandates, and poor coordination amongst government agencies can result in redundant work and worse than ideal results, which lessens the overall impact of public investment initiatives. Thus, optimizing the synergies between public spending and more general development goals requires improving policy coherence and coordination structures**.**

Objectives of the Study:

- To examine the significance of public expenditure on economic growth and employment
- To elucidate the correlation between public expenditure on employment outcome

A. Data and Methodology:

Data on public expenditure and public expenditure on education have been collected from various budget documents of Tamil Nadu for the three decades from 19901 to 2021-22. Data pertaining to health and educational infrastructure, enrollment, medical and para-medical personnel have been collected from Statistical Abstract of Tamil Nadu.

B. Results and Discussion:

The panel analysis indicates either the random effects approach or the fixed effects method. The first problem to address is time-invariant heterogeneity, which will decide whether approach yields consistent results. The fixed effects estimator yields consistent estimates if these attributes don't change over time. The unobserved fixed effects are strongly assumed to be uncorrelated with the regression in the random effects model, in contrast to fixed effects. This is assuming accurate and random effects model yields is a more consistent and effective estimate than the fixed effects model.

The two estimators were compared using the Hausman test. Both estimators are consistent under the null, but random effects are more effective; only fixed effects are consistent under the alternative. As a result, the test indicates that fixed effects should be applied and the null is rejected. To ascertain whether fixed effects or random effects should be used to estimate the model, the Hausman test is performed in Stata. H0 was rejected at both the 5% and 1% significance levels due to the X^2 test statistic of 80.62 and the p-value of 0, suggesting that the random effects technique would provide estimates that were not consistent. It also makes sense intuitively to use a fixed effects model as it is not possible to assume that all unobserved fixed effects have no correlation with the dataset's regressors. The Hausman specification test was followed by the reporting of the most appropriate result. To select

between models with fixed effects and those with random effects, the Hausman specification test was used. Although the results supported the fixed effects model, both models fixed and random were provided for comparison and to ensure the results' robustness.

The panel data regression model based on OLS estimates are expressed in following way

$$Y_{it}=\beta_0 + \beta_1 + X1_{it} + \beta_2 + X2_{it} + U_{it}$$

i = 1, 2……N

t = 1, 2……..N

Where, *i* stands for ***i*** th cross-sectional unit and *t* for the *t* th time period. In this type of estimation the intercept term is assumed to be constant across the cross sectional units. For better understanding of panel data models analyzed, other than using OLS estimates, the study uses the fixed effect and random effect estimates

C. Hausman Test:

Assuming that the random effects estimator is accurate, the Hausman test (H) statistics will be distributed asymptotically as x2 with K degrees of freedom. The null hypothesis, which states that is individual effects are uncorrelated with other regressors, cannot be rejected if the computed H-value is smaller than the table (x 2) value for the proper degrees of freedom and level of significance. (That is, approved). The Random Effect model rather than the Fixed Effect model is pertinent in this situation. Larger H favors for fixed effect model and lower value for random effect model. Hausman specification test is conducted to compare the fixed effect and the random effect model of the model is correctly specified and if individual effects are uncorrelated with independent variables, the fixed effect and random effect estimator should not be statistically different. The statistics is reported that the null hypothesis is rejected at one per cent significant level.

D. Fixed Effect:

The link between predictor and outcome variables within an entity, such as the percentage of education spending on higher education, the number of educational institutions and enrollment, employment generation in labor market is explored through fixed effects. When utilizing a fixed effect, each entity has unique properties that may or may not have an impact on the predictor variable. It is considered that there is a requirement to account for the possibility that an individual may influence or possess the predictor variables. This explains the reasoning behind the presumption that predictor variables and entity's error form are correlated. The influence of those time-invariant traits is eliminated from predictor variables by the fixed effect. It may therefore evaluate net impact. The fixed effect model also makes the crucial assumption that each individual's time-invariant traits are distinct from one another and shouldn't be connected with those of other individuals. Since every entity is unique, neither the constant nor the error terms should be connected with any other entity; if they are, then the fixed effect model is inappropriate. The fixed effect model's equation becomes

$$Y_{it} = 1 X_{it} \; i \; u_{it}$$

where α_1 (i=10 is the unknown intercept for each entity (n-entity-specific intercepts), Y_{it} = dependent variable(Where i=entity) and t=time) X_{it} =Independent variable, 1= Coefficient, u_{it}=*error term*

Table 1: Regression Result of Public expenditure on human capital

Variables	Pooling	Fixed	Fe with AR
Constant	2.1313 (6.42)	1.516 (5.31)	1.5183 (4.63)
Expenditure on education	-0.0011 (-0.31)	0.0081** (3.12)	0.0085** (1.98)
Enrollment Ratio	-0.0025 (-0.29)	-0.0023 (-0.48)	-0.0022 (-0.47)
Employment generation in Public and private sector	0.234 (0.113)	0.876 (1.23)	0.8543 (0.85)
L.M test	617.13		
Hasuman test	26.58		
Observation Groups	32	32	32
R^2	0.068	0.077	0.052

Figures in brackets indicate “t” values

The regression analysis of public education spending, the table value is less than the computed F value. Therefore, during the research period, there is a substantial correlation between the variables that were chosen and public expenditure. Additionally, it demonstrates that leverage has a major influence on spending on educational outcomes throughout the course of the research period. The point estimates, which range from -0.111 to 0.0951, indicate that when leverage level rises by 0.1 units, the expenditure to leverage increases by around 0.111 to 0.957. The growth opportunity metric, Tobin's q, significantly benefits from spending. The number of educational institutions and their enrollment rates has a big impact on costs. To choose the best appropriate empirical methodology: fixed effect, random effect, or pooling regression. There are two statistical analyses done. The random effect model's Lag Rangian Multiplier (LM) is the first. The individual effect μ of

zero is the null hypothesis. 517.13 is the chi-square value. The findings imply that the pooling regression is inappropriate in this instance and that the chohort effect is not zero. The pooling regression yields a regression co-efficient of leverage of -0.111, whereas the random and fixed effect models provide regression co-efficient of 0.0767 and 0.0951, respectively. According to the entire data, educational metrics rise by 0.76 percent for every 1% increase in funding for education. All the above groups for model (I) exhibit high R^2 and statistically significant F value showing a good fit and overall significance of the model. In general, the result shows that for public expenditure on higher education is an important determinant factor of enrollment in higher education and also employment generation in the labor market. The compatibility between higher education and employment generation is influenced by public expenditure on higher education during the selected period.

Conclusion:

The relationship between public expenditure on human capital and economic growth is a complex and multifaceted aspect of economic development. By making vital investments in infrastructure, human capital, and innovation, public spending is essential in promoting economic growth and job creation. However, in order to fully use public spending, important issues like budgetary sustainability, governance limitations, and policy coordination must be resolved. Policymakers can enhance the well-being of citizens and promote shared prosperity by optimizing the impact of public investment on inclusive and sustainable development through the adoption of a comprehensive and integrated approach. In summary, public spending is a potent weapon for fostering economic growth, generating employment opportunities, and constructing inclusive and resilient communities. It is not just a budgetary tool. As countries navigate the complex challenges of the 21st century, strategic investments in public expenditure can help unlock new sources of growth, innovation, and prosperity, laying the foundation for a more prosperous and sustainable future.

References:

1. Atkinson, A. B. and J. E. Stiglitz (1980) Lectures in Public Economics, Maidenhead, and McGraw Hill
2. Allen Peacock and Jack Wiseman (1961), The Growth of Public Expenditure in the United Kingdom, NBER, Princeton
3. Barro, Robert. J. (2001): Determinants of Economic Growth: A Gross Country Empirical Study, Lionel, Robbins Lectures, M A MIT press, Cambridge.
4. Dutta. R.C. (1985): "Education and the Distribution of Earnings: The Maintenance of the Status", Artha Vijana, Vol.27, No.1, pp.1- 20
5. Musgrave, R A and Peggy B Musgrave (1989): Public Finance in Theory and Practice (5th ed.), McGraw Hill, New York
6. Schultz, T.W. (1963): The Economic Value of Education, Columbia, London
7. Shariff, Abusaleh, Prabir Ghosh and S. K. Mondal (2002) State Adjusted Public Expenditure on Social Sector and Poverty Alleviation Programmes. Economic & Political Weekly, Vol.37, No.8, p.767
8. Wagner, A (1890) Three Extracts on Public Finance in R.A. Musrave and A. T. Peacock (eds), Classics in the Theory of Public Finance, London, McMillan