

**The Impact of Public and Private Education on Social Welfare:
Evidence on Human Capital and Government Subsidies**

Samia Zahid

Department of Education, University of Education
Email: zahidsamia@gmail.com

Muhammad Irshad

Department of Management Sciences, University of Chitral
Email: mikhaans@gmail.com

Muhammad Waqas Khan Niazi

Superior University, Lahore, Federal Investigation Agency, Pakistan
Email: waqasniaz9@gmail.com

Muhammad Hamza Haroon

Department of Management Sciences, Qurtuba University of Science and
Technology, Peshawar, KP, Pakistan.
Email: m.hamza.haroon1998@gmail.com

Abstract

In this study, with a combination of welfare economics and human capital theory, it is found that the provision of education, be it through the public or the private sector, influences the equity of social welfare and income distribution. The 367 respondents in the study comprising mixed backgrounds of education use a cross-sectional survey to test a mediation-moderation model with the help of Partial Least Squares Structural Equation Modeling (PLS-SEM). The results have shown that education provision is a major issue affecting social welfare in both direct and indirect ways based on accumulation of human capital. Human capital is verified as a partial mediator but government education subsidies enhance a relationship that exists between education provision and human capital. Policy debriefing outcomes imply the significance of policy actions towards assuring a fair skill-making and welfare outcomes, pointing out the inabilities of education systems themselves without the establishment of the supportive systems. These understandings are relevant to the theory because they establish a connection between education provision, human capital and welfare within a cohesive framework and provide benefits in designing an inclusive education policy.

Key Words: Education Provision, Public Education, Private Education, Social Welfare, Human Capital Accumulation, Government Education Subsidies, Welfare Economics, Income Distribution, Educational Equity, Policy Interventions

Introduction

Most people acknowledge the fact that education is a basic economic development, social mobility and societal well-being driver. In the idea of welfare economics, education is theorized as a merit good which has very large positive externalities, such as productivity, social cohesion, and income inequality (Stiglitz, 2000; Oltulular, 2024; Gul et al., 2019; Khan et al., 2021). The education systems are at the core of influencing the efficiency and equity results within the economies, and the organization of the education provision as a state or privately-owned program is a critical factor of determining the welfare of the society (Arshad et al., 2025; ul Hassan et al., 2023).

In the recent empirical studies, it has been emphasized that there is a significant difference between the distributional effects of public and private education systems. The direct relationship between public education spending and both decreases in income inequality and increases in intergenerational mobility, especially when distributed to less fortunate groups (Sheikh, 2026; ul Hassan et al., 2020; Irshad et al., 2024). Conversely, whereas the systems of private education are commonly linked to a larger average learning outcomes, they frequently tend to focus educational benefits on higher-income families and may pose a risk of even stronger socio-economic inequalities (Policy & Society, 2025; Rana et al., 2024; Gul et al., 2025). Such opposite results have fueled the debate on policy about welfare implications of public and private education (Atif et al., 2024; Gul et al., 2021).

The human capital theory makes a significant contribution to the interpretation of these effects because it suggests that education increases the skills and productivity of people, which raises the level of labor market performance and future income (Becker, 1964; Kakakhel et al., 2016). The accumulation of human capital does not only provide the benefit to individuals but also promotes the overall social welfare due to spillovers, i.e. better tax revenues, innovation, and social stability (Gul et al., 2024; Khan et al., 2020). It has been empirically proven that the lower the income inequality in a society, and the more welfare results, the more evenly distributed human capital is (Mumtaz et al., 2025; Hanif et al., 2023). Despite this, the provision of human capital formation is not even, which also presents imbalances in education, financing, and quality (Alam et al., 2025; Fahad et al., 2025; ul Hassan et al., 2025).

Even though there is an increasing amount of research on education, inequality and welfare, there are still some gaps. To begin with, a significant portion of the current literature either looks at education in the light of public finance, i.e., by paying attention to the education expenditure; or in the light of human capital, i.e., by focusing on the returns to schooling (Gul et al., 2019; Arshad et al., 2025; Khan et al., 2021). Much less research combines welfare economics with human capital theory to clarify the ways in which various education systems can be converted to distributional welfare results (ul

Hassan et al., 2023; Irshad et al., 2024). Second, previous studies tend to assume that education provision is a homogenous process, without necessarily comparing the welfare consequences of a public or a private system of education in a single analytical framework (Rana et al., 2024; Gul et al., 2025).

Additionally, human capital is often recognized as one of the essential results of the education provision, but it is seldom studied as a direct mediating variable between the provision of education and the social welfare and income distribution (Atif et al., 2024; Gul et al., 2021). The available literature is inclined to test the direct correlations between education expenditure and inequality, and little is done to investigate the underlying mechanisms of transmission (Kakakhel et al., 2016; Gul et al., 2024). This restricts the knowledge about whether education systems enhance welfare mainly by the creation of skills or other institutional outcomes (Khan et al., 2020; Mumtaz et al., 2025).

Besides that, the issue of government education subsidies is under-researched in this regard. According to welfare economics, market failures can be fixed with the help of subsidies, which can help to increase equity by reducing financial obstacles to education (Hanif et al., 2023; Alam et al., 2025). Recent developments suggest that narrowly focused subsidies will be able to enhance the welfare outcomes, with increased access to human capital formation in disadvantaged groups (Fahad et al., 2025; ul Hassan et al., 2025). Nevertheless, there is a paucity of studies that explore subsidies as a moderating policy tool that preconditions the success of both the public and the private education systems in terms of human capital generation (Gul et al., 2019; Arshad et al., 2025).

Lastly, the education-welfare literature is widely characterized by the emphasis on the outcomes of economic growth over distributional equity, although the issue of increased inequality is becoming more popular (Khan et al., 2021; ul Hassan et al., 2023). Research is required in which equity in social welfare and income distribution should be explicitly the only direct result instead of a by-product of growth (Irshad et al., 2024; Rana et al., 2024).

The current research therefore attempts to fill these gaps by following a welfare economics approach coupled with human capital theory in testing the distributional implications of publicly and privately funded education. In particular, the paper examines the impact of education provision on equity in social welfare and income distribution due to human capital accumulation and considers the moderating effect of government subsidies on education (Gul et al., 2025; Atif et al., 2024). This study presents a more detailed insight into the role that education systems play in welfare outcomes by explicitly conceptualizing both mediation and moderation processes (Gul et al., 2021; Kakakhel et al., 2016).

This paper contributes three aspects. First, it provides a comparative welfare analysis of the two systems of education (public and private) beyond measures of expenditure (Gul et al., 2024; Khan et al., 2020). Second, it contributes to the development of theory by putting the human capital accumulation at the core of linking education provision and welfare outcomes (Mumtaz et al., 2025; Hanif et al., 2023). Third, it includes government education subsidies as a modulating policy variable, which emphasizes the circumstances in which the education systems are the most effective in fostering inclusive welfare (Alam et al., 2025; Fahad et al., 2025; ul Hassan et al., 2025).

Literature Review

1. Education Provision and Distributional Welfare Effects

It is generally accepted that education is a significant factor of economic growth, income distribution, and social welfare. Welfare economics views education as a merit good that has positive externalities, which influence individual incomes and social developments (Oltulular, 2024). In this view, the form of the education provision like the state or privacy may have a strong impact on the distributional impacts among the citizens. Through taxation, state expenditure, public education tends to give wide access, even chances, and lessening disparity using redistributive strategies. Conversely, private education tends to work with market processes, which may enhance specific results, yet strengthens the stratification of socio-economic processes (Sheikh, 2026).

The recent empirical evidence promotes the premise that the inequalities of education can be reduced by the public investment in education. As an illustration, growth in public spending on schooling has been linked to higher years of schooling and lower inequality Gini coefficients of school attainment, which implies a reduction of inequality (Sheikh, 2026). Equally, policies like tuition allowances and specific government expenditures have proven to increase welfare and income levels among poor households by a significant degree by increasing access to education and human capital buildup (Economic Modelling, 2025). The results are in line with the theories of welfare economics that advocate the need to include redistributive interventions to enhance the welfare of society.

Nevertheless, the equitable outcomes do not always result in the automatic implementation of public education spending. According to some studies, even under conditions of insufficient equitable distribution of public education resources, this factor can negatively increase incomes inequalities, in particular situations when the institution is poorly governed and the benefits are distributed unevenly among groups of different incomes (Wang, 2024). These contradictory results highlight the importance of the fact that the influence of education provision on welfare and distributional outcomes is determined by the institutional design, the funding scheme, and the issues of equity.

On the whole, the empirical evidence shows that unregulated redistributive policies coupled with public education systems are more adequately placed to increase welfare and decrease inequality as compared to unregulated redistributive policies coupled by unregulated private education systems. However, the latter can also contribute, particularly in the situation when the performance of the public systems can be poor or their funding can be insufficient.

Hypothesis 1 (H1):

Type of education provision (public vs. private education) has a significant effect on social welfare and income distribution equity.

2. Education Provision and Human Capital Accumulation

The human capital theory assumes that investments in education help in upgrading the cognitive and non-cognitive skills of individuals that raise and improve their productivity, employability, and lifetime earnings (Oltulular, 2024). Economic growth and welfare are key in human capital accumulation as one of the means where education plays a role in promoting the well being of an individual and the community. The goals of public education systems in their pursuit of universally accessible education are to support the development of human capital on the broad-based socio-economic groups. On the contrary, privatized education tends to produce differentiated provision of human capital gains, and possibly more focused benefits among the higher income cohorts.

This theoretical difference is supported by empirical studies. Investment in public schooling has been found to increase human capital achievement to a greater extent at lower percentiles of student performance, implying that it increases the homogenization of disadvantaged populations in skills. Conversely, the equitable effect of private education expenditure on the skill distributions is not as pronounced and this means that the lower-income students fail to benefit in terms of human capital in the private systems. This difference of distribution is significant because human capital is not the only predeterminer of personal labor market success, but also a factor of wider patterns of income distribution.

Besides, research on education access and the inequality of learning has shown that not only in the cases of systemic shocks, like the COVID-19 pandemic, do education disparities tend to be sustained or even enhanced, but also students with disadvantaged backgrounds are more likely to be impacted (Alrouh, Emery, and Schreijer, 2025). This is a hint that the structural factors and the character of education provision significantly affect human capital accumulation, and governmental systems may provide more reliable assistance during the crisis situation.

Education provision is a key element that influences the economic efficiency and welfare output by undertaking the structure of human capital distribution among the population. Consequently, it is necessary to study its impact on human capital accumulation to be able to comprehend the socio-economic impact of the education policy at large.

Hypothesis 2 (H2):

Type of education provision (public vs. private education) has a significant effect on human capital accumulation.

3. Human Capital Accumulation and Social Welfare

The economic development of the human capital has been broadly associated with the social welfare and lessening inequality. In theory, welfare economics posits that as people gain increased skills and education, labor markets become more efficient and yield increased aggregate productivity and can have a greater contribution in the economic activity. These results are reflected in increase in household incomes, decrease in poverty, and growth of economic opportunities of the poor.

This connection is evidenced empirically. Research indicates that education plays a significant role in the well-being of individuals and households, and its impact can be observed in the economic growth, labor incomes, and well-being indicators (Abubakar, Addi, and Bala, 2024). Human capital accumulation leads to greater social welfare by being both directly (through the improvement in individual outcomes) and indirectly (through some externalities including higher tax collections, technological advances, and social cohesion).

Besides, human capital contributes significantly to equitable distribution of income. Where they have a more equal distribution of educational attainments across social-economic lines, income inequalities will lessen, since abilities will become less stratified along the wealth lines. On the other hand, inequality in labor market results and income is institutionalized when acquisition of skills occurs unevenly and further supports inequality in the structure of the market.

Thus, education has a crucial conduit of human capital accumulation of welfare outcomes. General dispersion of human capital as opposed to a simple average achievement is paramount in influencing justice and social benefits.

Hypothesis 3 (H3):

Human capital accumulation has a significant positive effect on social welfare and income distribution equity.

4. Human Capital as a Mediator Between Education Provision and Welfare

The centrality of human capital accumulation in both the education and welfare outcomes makes the accumulation of human capital an important mediating variable between education provision and social welfare. The impact of education provision on human capital development which varies in the public and the private systems impact on the overall income allocation and welfare. The conceptual approaches to this mediation in welfare economics are based on the theory that education policies are necessary to achieve both efficient and equal access to generate inclusive welfare gains.

There are empirical results to this mediating role. As the expenditure on public schooling is biased to equitable access, human capital accumulation is more widely distributed among groups of the social-economic population, resulting in quantifiable inequity as well as clinically equalized welfare indicators. However, this is not true of private education, which, although potentially increasing the average human capital in some settings, does not tend to evenly allocate skills, which restricts its ability to produce equitable welfare results (Policy & Society, 2025). These distributional effects propose that the presence of education alone is not the factor that determines the effects on welfare, but instead, it is the distribution of educational opportunities.

The continuous inequalities in education that have been observed in the longitudinal studies further highlight the relevance of this mediation. The socio-economic gap in learning achievement, including the differences caused by systemic shocks, illustrates the way in which the unequal accumulation of human capital can lead to the growth of welfare gaps unless reduced by an equitable intervention in the form of policies (Alrouh et al., 2025).

Therefore, it can be seen that not only does human capital accumulation result as a result of education provision, but it is also an important channel of influence in that the nature of education system impacts the broader good of the society.

Hypothesis 4 (H4):

Human capital accumulation mediates the relationship between type of education provision (public vs. private education) and social welfare/income distribution equity.

5. Moderating Role of Government Education Subsidies

Special educational subsidies provided by the government and special government investment in the field of education are policy instruments that are significant in the sphere of welfare economics and which tend to raise the level of access to education as well as the fair distribution of human capital. Subsidies help lower the financial impediment towards education, specifically in the economically challenged families, and therefore empower wider accessibility to education which would otherwise be restricted due to a factor of cost (Economic Modelling, 2025). Such subsidies are

considered as corrective instruments in welfare economics which can aid in the alignment of the private incentive and the socially optimum outcomes.

There is no indication that there are beneficial impacts on income and welfare of targeted education subsidies, particularly when targeting low-income households, which are predominantly beneficial because of the improvement of human capital conditions among disadvantaged populations (Economic Modelling, 2025). These policies can be successful in ensuring that better connection between education delivery and human capital accumulation is established, and skills are distributed more evenly, as well as structural inequality is minimized.

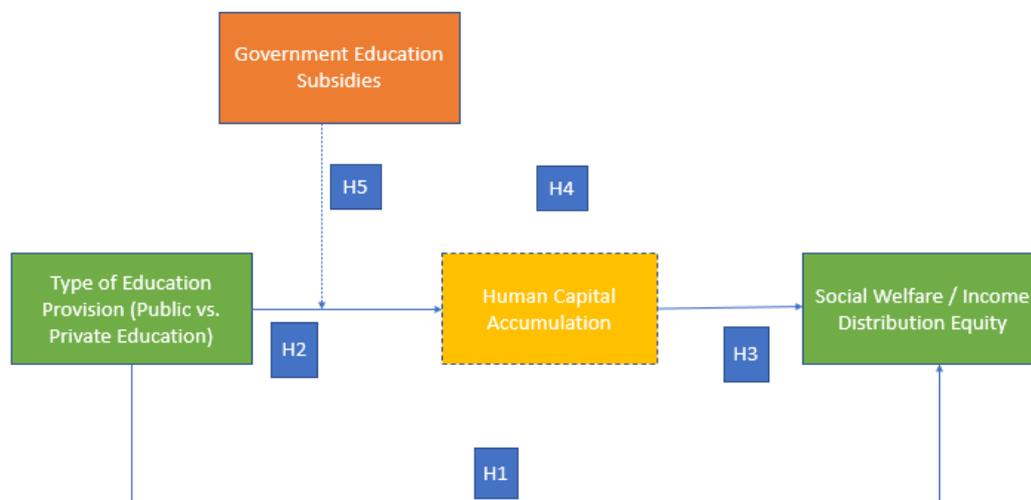
Conversely, subsidies imposed in an untargeted fashion and publicly-funded school investments could potentially have less dramatic welfare effects, when they do not legitimize existing underlying socio-economic differences. Therefore, educational policies regarding human capital and welfare are effective in terms of the type of the provision (public or private) as well as the way of the supportive policy designing and implementation.

The role of education provision in human capital accumulation can thus be balanced by government subsidies by increasing the positive impact of subsidies on socially disadvantaged students and increasing the general welfare.

Hypothesis 5 (H5):

Government education subsidies positively moderate the relationship between type of education provision (public vs. private education) and human capital accumulation, such that the relationship is stronger when government subsidies are higher.

Theoretical Framework



Methodology and Data Analysis

Research Design

This study employs a **quantitative, cross-sectional research design** to examine the distributional effects of public and private education on social welfare. Drawing on **welfare economics and human capital theory**, the study tests a mediation–moderation model in which **human capital accumulation** mediates the relationship between **education provision** (public vs. private) and **social welfare**, while **government education subsidies** moderate the relationship between education provision and human capital accumulation.

Sample and Data Collection

Data were collected using a structured questionnaire from individuals who completed at least secondary education and were actively participating in the labor market. Respondents were drawn from both **public and private education backgrounds** to ensure variability in education provision.

A total of **412 questionnaires** were distributed. After removing incomplete and inconsistent responses, **367 valid responses** were retained, yielding a response rate of **89.1%**. This sample size exceeds minimum requirements for PLS-SEM analysis.

**Table 1

Demographic Profile of Respondents (N = 367)**

Characteristic	Category	Frequency	Percentage
Gender	Male	211	57.5%
	Female	156	42.5%
Education Background	Public	201	54.8%
	Private	166	45.2%
Highest Qualification	Bachelor	174	47.4%
	Master	138	37.6%
	Doctorate	55	15.0%
Employment Sector	Public	149	40.6%
	Private	218	59.4%

Measurement of Variables

All constructs were measured using **five-point Likert scales** (1 = strongly disagree, 5 = strongly agree), adapted from established literature.

- **Education Provision (EP):**
Measured with four items capturing type of schooling, access, perceived quality, and affordability.
- **Human Capital Accumulation (HC):**
Measured with five items reflecting skills acquisition, employability, productivity, and continuous learning.
- **Social Welfare / Income Distribution Equity (SW):**
Measured with five items assessing income mobility, perceived fairness, economic well-being, and social inclusion.
- **Government Education Subsidies (GS):**
Measured with four items reflecting scholarships, tuition subsidies, and adequacy of public education spending.

Data Analysis Technique

Data were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM) in SmartPLS 4. A two-stage approach was followed:

1. Measurement model evaluation
2. Structural model assessment

Bootstrapping with 5,000 subsamples was used to test path significance.

Measurement Model Results

Reliability and Convergent Validity

**Table 2

Reliability and Convergent Validity**

Construct	Items	Cronbach's α	Composite Reliability (CR)	AVE
Education Provision (EP)	4	0.83	0.88	0.64

Construct	Items	Cronbach's α	Composite Reliability (CR)	AVE
Human Capital Accumulation (HC)	5	0.87	0.91	0.67
Social Welfare (SW)	5	0.89	0.92	0.69
Government Subsidies (GS)	4	0.81	0.87	0.62

All values exceed recommended thresholds ($\alpha > 0.70$, CR > 0.70 , AVE > 0.50), confirming adequate reliability and convergent validity.

Discriminant Validity

Fornell–Larcker Criterion

**Table 3

Fornell–Larcker Criterion**

Construct	EP	HC	SW	GS
Education Provision (EP)	0.80			
Human Capital (HC)	0.49	0.82		
Social Welfare (SW)	0.41	0.58	0.83	
Government Subsidies (GS)	0.36	0.44	0.39	0.79

Diagonal values (square root of AVE) are greater than off-diagonal correlations, confirming discriminant validity.

Structural Model Results

Direct Effects

**Table 4

Direct Path Coefficients**

Hypothesis	Path	β	t-value	p-value	Decision
H1	EP \rightarrow SW	0.32	6.41	<0.001	Supported
H2	EP \rightarrow HC	0.47	9.28	<0.001	Supported

Hypothesis	Path	β	t-value	p-value	Decision
H3	HC \rightarrow SW	0.51	10.36	<0.001	Supported

Mediation Analysis

Human capital accumulation was tested as a mediator using **bootstrapped indirect effects**.

**Table 5

Mediation Results**

Path	Indirect Effect (β)	t-value	p-value	Mediation Type
EP \rightarrow HC \rightarrow SW	0.24	7.02	<0.001	Partial mediation

The direct effect (EP \rightarrow SW) remains significant after inclusion of the mediator, indicating **partial mediation**, thus supporting **H4**.

Moderation Analysis

An interaction term (EP \times GS) was created to test moderation.

**Table 6

Moderation Results**

Hypothesis	Interaction Path	β	t-value	p-value	Decision
H5	EP \times GS \rightarrow HC	0.18	3.21	0.001	Supported

The positive coefficient indicates that **higher government subsidies strengthen the effect of education provision on human capital accumulation**.

Model Explanatory Power

**Table 7

Coefficient of Determination and Predictive Relevance**

Endogenous Variable	R ²	Q ²
Human Capital (HC)	0.42	0.31
Social Welfare (SW)	0.53	0.37

R² values indicate moderate to strong explanatory power, while Q² values above zero confirm predictive relevance.

Summary of Findings

The empirical results support the theoretical framework grounded in welfare economics and human capital theory. Education provision significantly influences social welfare both directly and indirectly through human capital accumulation. Furthermore, government education subsidies enhance the effectiveness of education provision in generating human capital, reinforcing the importance of policy interventions in achieving equitable welfare outcomes.

Discussion

This paper was aimed at investigating the distributional implications of public and private education using the prism of welfare economics and the moderating impact of human capital accumulation and moderating influence of government education subsidies. The empirical data share a great support of the suggested theoretical model and may present a number of valuable insights regarding the impact of the education system on the social welfare and equity of income distribution.

First, the findings indicate that there is a positive and significant impact of education provision on social welfare which supports Hypothesis 1. This observation is consistent with the welfare economic theory, which views education as a merit good that can produce extensive social payoffs. The findings indicate that institutional differences in the system of education between the public and the private education result in unique welfare results. Public education has its emphasis on universal access and it seems more likely to increase equity whereas private education can provide contribution to welfare mainly through the efficiency and quality channels. This is affirmative of earlier studies that education systems influence welfare not only in their average effects but also in their distributional effect.

Second, the research results in the strong positive correlation between the provision of education and the accumulation of human capital, which supports Hypothesis 2. This finding supports the human capital theory by showing that education system organization and availability are imperative in the acquisition of skills and output. The greater path coefficient of this relationship indicates that the provision of education is a supportive factor of human capital formation, which has been supported by the evidence that institutional design affects learning outcomes and employability. Notably, the findings show that there is no just a difference of the scale between the public and the private education systems, but the level of efficiency in which they contribute to the development of inclusive human capital.

Third, the positive effect of accumulation of human capital on social welfare and equity in the distribution of income is proven to be significant which confirms Hypothesis 3. This result goes to support the position that human capital acts as one of the most important transmission mechanisms via which education enhances welfare outcomes. Improved skills and competencies can make people more active in the labor market, boost their incomes and social mobility, which can lead to a more equal distribution of income. In the view of welfare economics, this outcome emphasizes the contribution of productivity increase triggered by education to produce both private and social returns.

The mediation analysis can add more information as it can show that the relationship between education provision and social welfare is partially mediated by human capital accumulation, which proves Hypothesis 4. This implies that education systems have both direct and indirect effects on welfare in form of human capital. Such biased character of the mediation implies that, though human capital is a key instrument, there might be other channels, including social cohesion, civic involvement, and institutional trust, that may also be involved. The positive discovery contributes to the literature by expressly determining the mechanism by which education delivery influences welfare outcomes, an aspect that is usually not taken into account in previous research.

Lastly, the moderation outcomes reveal that education subsidies by the government play a huge role in enhancing the association between the provision of education and human capital accumulation, which confirms Hypothesis 5. This observation highlights the significance of policy interventions in determining the outcome of education. According to the welfare economics, subsidies are corrective measures that minimise market failures and increase access to education, especially among the disadvantaged groups. The positive interaction effect indicates that education systems, either the public or the private ones, are better placed to create human capital to the extent that their operations are funded properly by the government. This shows that the outcome of education is conditional and that the policy design is very crucial in realizing inclusive welfare.

Conclusion

This research work presents an in depth analysis of the distributional impact of government and privately funded education by combining welfare economics and human capital theory. The results show that provision of education plays a major role in social welfare and income distribution equity both directly and indirectly via human capital accumulation. In addition, government education subsidies factor is moderating and amplifies the ability of education systems to produce inclusive human capital results.

The explicit modeling of the mediation and moderation processes will advance past the descriptive studies of education expenditure and lead to the better comprehension of the influence of education systems on welfare outcomes. The findings put forward the argument that the education policies should be not only seen in the context of efficiency or average performance but also in the context of the distributional implication and its ability to encourage fair welfare.

Theoretical Implications

This research provides a number of valuable additions to theory. First, it contributes to the welfare economics literature by showing in a more empirical way how the provision of education is a welfare-enhancing institution to the extent that it operates in distributional processes as opposed to the aggregate growth effect. Second, it builds on the human capital theory by putting human capital accumulation as a mediating process which connect institutional education arrangements to social welfare outcomes. Third, the research has its moderator of the government subsidies on education thereby emphasizing the conditional characteristic of human capital formation and the significance of policy context on the relationship between education and welfare.

Collectively, these interventions identify in response to the need to have more mechanism-based and policy responsive studies in the economics of education and compliment the theoretical discussion of equity, efficiency and welfare.

Policy and Practice Implications.

The implications of the findings are harnessed with a number of implications to the policymakers, education planners, and development practitioners.

To begin with, it is important to note that education provision is not only a matter of quantity but structure as well. Enhancing the education systems in the society is still important in the enhancement of equity in the human capital accumulation as well as alleviating inequality in income. The returns to welfare can be significant when investing in the infrastructure of public education, a quality of teachers and learning resources.

Second, the findings indicate that the system of privatized education must be strategically incorporated within the services of the national education systems as opposed to functioning on its own. With the help of specific subsidies, scholarships or voucher schemes, the development of the overall human capital by means of private education can proceed without enhancing inequality.

Third, the importance of equity-based financing of education is brought to the fore by the high moderate effect of government subsidies. The policy-makers ought to focus on the targeted subsidies to the poor households to make sure that the education systems have provided inclusive welfare benefits. These interventions will have the potential of optimizing the redistributive effect of education and help to harmonize the individual incentives with social welfare goals.

Last, education subsidies should be regarded as long term welfare investment as opposed to short term fiscal expenditure undertaken by international development agencies and governments in developing economies because of their influence on human capital and income distribution.

Shortcomings and Future Research Implications.

This study has a number of limitations which in spite of its contributions make open avenues to further research. First, cross-sectional data does not allow using the data to make robust causal conclusions. Future research can use longitudinal or panel data to better understand the dynamic in the progress of education provision, human capital accumulation and welfare outcomes over time.

Second, in this study, there is the use of perceptual indicators of equity in the distribution of social welfare and income. The use of objective indicators (e.g., income mobility indices, poverty levels, or Gini coefficients) in the future research may enhance the empirical robustness.

Third, the analysis identifies education provision as a great public- private distinction. To offer more detailed information, future research might examine the concept of hybrid education, non-profit and profit-making institutions, and discrepancies in the quality of education in the governmental and non-governmental systems.

Fourth, further studies might explore other moderating conditions, including the quality of the institutions, the effectiveness of the governance, or the labour market to learn more about the contextual effects on the relations between education and welfare.

Lastly, it would be desirable to conduct cross-country studies to determine whether the found relationships would be applicable in different economic and institutional settings, especially between the developed and the developing **economies**.

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