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The Impact of Governance on Inclusive and Equitable Quality Education (SDG4) in Iran

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Education is assumed as one of the intrinsic and fundamental rights of all individuals and as a tool for improving the social skills during the life and also the most powerful tool for the sustainable development because without an appropriate education, there would be no possibility to get riddance of poverty, hunger, malnutrition, diseases and mortality and inequality reduction. Accordingly, we can't achieve to the sustainable development, protecting our earth and arranging a perpetual peace in the world without an appropriate education. In this study, the effect of governance on SDG4 has been studied in Iran since 1990 to 2019 using the GMM method. The potential energy amount formula saved in the electric circuit capacitor (Physics) has been applied for the theoretical foundations. The foregoing results denote that there is a weak contact among government, government expenditure on education and effectiveness with inequality in education because of paying inadequate attention by the governance to remove the educational discrimination and also improving the economic, social and cultural abilities. Also, the poor relation between Gross National Income Per Capita (GNI) and Inequality in Education can be indicative of the low quality of education in the educational canters therefore those families that are of lower affordability will be liable to the educational discrimination. Accordingly, the governance here in Iran can be realized by increasing the welfare, prosperity and improving the education quality (Graders & Students) and increasing the levels of qualification (Teachers & Professors) with the aim of lasting and perpetual educations based on experience, practice and research. These can also materialize the SDG4 in Iran and then propel the sustainable development realization in Iran towards the reality through improving Iran's human development index. Also, the government can accelerate the SDG4 realization by implementing a total structure and an appropriate mechanism and also by decreasing the urbanization growth and applicable budget appropriation and through the justly distribution of educational facilities and the pulling power of teaching method.

Keywords: SDG4; Equitable Quality Education; Governance; Iran; Capacitor

Subject classification codes: I24, I25, I28, I3, N15
INTRODUCTION

The first definition of literacy which was presented in the early twentieth century was only referred to the reading and writing abilities of the motherese. In compliance with such definition, a schooled person was the one who could be able to both read and write his/her own mother tongue. But the new definition provided by UNESCO and for the 21st century has categorized the various types of literacy in six classes which include: Emotional literacy, communication literacy, financial literacy, media literacy, educational literacy and computer literacy and with regards to this new definition, the ability of making changes has been taken into consideration as the literacy criteria. Namely, a person is assumed as an educated one that he/she can make a change in his/her life using his/her own readings and learnings. As a matter of fact, this definition can be deemed as a complement for the former definition because just knowing a subject matter cannot mean practicing the same and if the skills and learned knowledge cause a significant change in the life, then we can say that such person is a literate one. Literacy can be assumed as a tool for improving the social skills during our life and an intrinsic or inherent part of the individuals' right of education. The multiplier effect of literacy can add power to the individuals and also enable them to participate in the society and the said effect can help them to improve their livelihood. Also, the literacy is deemed as a driver for sustainable development because it provides the possibility of more participation in the labor market and the multiplier effect seeks to improve the child's and family's health, nutrition and leads to the poverty reduction and develops the life opportunity. Beyond the conventional notion that literacy is considered as a set of reading, writing and numeration but now the literacy is known as a tool for recognizing, understanding, interpreting, creating and communicating in the digital growing world, text-mediated, information-rich and fast-changing (UNESCO, 2021).
In 2015, the United Nations Organization enacted the 2030 agenda for transforming the world and sustainable development thereof by 2030. This agenda follows some different objectives including the environment, climatic changes and whatever is assumed as important and drastic for the future generation. The fourth objective of such agenda is the sustainable development goal on education (SDG 4) that all 192 countries which are belong to the United Nations Organization must provide their people with some identical and permanent facilities of education with high quality regardless to gender, ethnicity, age and any other difference and discrimination by 2030. This part of such program which is drawn up by the United Nations Organization for 2030 is called SDG4- Education 2030 of UNESCO (UNESCO, 2015).

With regards to the education deed 2030 and the importance thereof for the growth of individuals' social skills as a tool for the sustainable development and also adopting the agenda 2030 by the leaders of countries, therefore, the purpose of such essay is to peruse the effects of Iran's governance method for realizing SDG4.

LITERATURE REVIEW

The importance of education was fully-described as the main part of sustainable development (SD) by UNESCO and in 2002 (Amador et al., 2015) and it was argued that education for sustainable development (ESD) must be incorporated at all educational levels and programs and for all the educational fields of study (Ahlberg, M., Aanismaa, P., & Dillon, P., 2005, Corcoran and Wals, 2004, Cortese 2003). Although, there are many researchers who claim that such a case is not taken into consideration (Cortese 2003). Referring to the challenges in implementing the sustainable development in the higher education, Bosselmann (2001) stated that the traditional approaches of unilateral lecture are of a restricted tool with regards to the complexity of education for the sustainable development. As a solution for such problem, most of
sustainable development researchers ask for some sustainable educations based on the experience, participation, practice and research (For example Bosselmann 2001 & Christie et al.2013). The new educational centers are basically student-oriented ones and involve some strategies such as field works, playing the roles, discussions, reflective reports and the important responsibilities of reading and writing (Christie et al.2013 & Garrard, 2010) and they are indicative of a remarkable change in the learning and higher education systems (Sterling, 2012).

The university system will be accountable for today and the future in terms of helping the graduates in perception the knowledge and educational skills for the sustainable development (Kabadayi, 2016 and Sterling, 2012). As Thomas (2005) argues, the main performance of a higher education system can be the presentation of learned outstanding graduates in order to achieve to the sustainable development. Accordingly, some educational courses of sustainable development have been presented and organized by the universities for helping the students and for changing to the best-qualified citizens and on the local and global levels (Tingey – Holyoak & Burritt, 2012). Teachers are of a very important role in teaching the children and adolescents so that they could be the future leaders for protecting the environment (Esa, 2010). Therefore, we need some learned teachers for perception the students' problems and for using the technology in educating and also using the different educational strategies in this regard (Ambusaidi, 2011). National Committee for Sustainable Development (NCSD) which has not been dropped behind compared with the other countries was established in Iran in 1992 for compiling the plans and strategies related to Riois Earth Summit Committee statements (Maknoon, 2006). The bylaws issued by this committee which have been adopted by the Iranian Department of Environment can be considered as inspiring with
regards to the different challenges in the economic, social and environmental aspects which the government is now facing with (Bahae and Pisani, 2009).

Several studies have been done for the sustainable development on the students’ perception and attitude into the education (Yuan and Zuo, 2013). A questionnaire was distributed among 1134 students in China in order to study their level of perception and awareness towards sustainable development. Results showed that the students were little informed of the sustainable development and argued that the operational activities of university are more. Pestana and Parreira, (2016) researched about Portuguese students' perception of sustainability at a private university studying the Human Research Management. Using the questionnaire and focused groups, the researchers got to this conclusion that the students were sufficiently informed of the sustainable development and they are now of a positive attitude thereto.

On the other hand, there are now other studies which have reviewed the teachers' perception and attitude into the sustainable development (Uitto and Saloranta, 2017). The sustainability competence of 442 high school teachers was all surveyed by the said researchers in Finland. These researchers prepared a questionnaire of 53 questions for gathering the data of 49 schools and then applied an explorative factor analysis, regression and ANOVA for the data analysis. They found a remarkable difference of the teachers' perception from their skill regarding the sustainable development. The teachers' age had a remarkable effect on perceiving the sustainable development by the teachers. Selvi et al., (2018) studied the perception of sustainable development among 35 volunteer teachers which are now taught in the different subject matters. Using the semi-structured interviews, they got to this conclusion that the volunteer teachers didn't know the exact definition of sustainable development and they had only heard the ecological aspect and they knew nothing on the economic, social and or political aspects
thereof. Using the combined method, Tomas et al., (2015), in one study reviewed the pre-service teachers into the education for the sustainable development in Australia. The Four – Point Likert Scale Survey and Semi-structured Interview was used for the data collection. It was specified that the pre-service teachers’ attitude had been improved for the sustainable development and their self-reliance increased and then their ESD-related knowledge developed, too. Even though, Brito et al., (2018) performed a research on the instructors and students of four academic parts at secondary schools, undergraduate and postgraduate programs of Mexico (Manni et al., 2013, De et al., 2015, Selvi et al., 2018 Turkey, Ambusaidi and Al Washahi 2016 Oman, Burmeister et al., 2013 Germany, Kang 2019, Korea).

Reviewing the governance quality in Iran over the past century and in order to present a framework for describing the governance and the relation of the same with Iran's economy, Azadi (2019) believes that the main challenges in Iran are because of the government's poverty and destitution. Because of the low and non-inclusive growth over the past four decades, the stress signs have been multiplied in Iran's economy and society. The far-reaching destitution and increasing inequality, low participation of the manpower and increasing job-scarce, human capital flight, decreasing productivity, banks crises and pension, increasing public debts, losing the social capital and serious environmental problems all are among the challenges that Iran is now facing with. In the meantime, the corruption has become systematic and then changed to a descending spiral which reinforces itself over time. Therefore, the necessity of performing one transformational approach can be binding in relation with a reduction in the political institutions' actions, transparency improvement and accountability. The bad governance together with a low and non-inclusive economic growth all have led to a small
participation of manpower and then losing the social capital and generally speaking, the failure in ensuring welfare and prosperity (Jariani, 2021).

Reviewing the studies related to SDG4 denotes that there have not been performed any research so far and regarding the effects of governance method on education with the inclusive and justly quality in Iran despite the importance of education as a tool for the growth of social skills and for realizing the sustainable development.

**ANALYTICAL APPROACH**

Education is assumed as one of the intrinsic and fundamental rights of all individuals and as a tool for improving the social skills during the life and also the most powerful tool for the sustainable development because without an appropriate education, there would be no possibility to get riddance of poverty, hunger, malnutrition, diseases and mortality and inequality reduction. Accordingly, we can't achieve to the sustainable development, protecting our earth and arranging a perpetual peace in the world without an appropriate education. Iran as one of the richest countries in the world which holds the fourth oil reserves and the second natural gas reserves namely the world's largest deposits of proved oil and natural gas reserves (U.S. Energy Information Administration, 2019). Iran holds the 70 rank for the Human Development Index (HDI) among 189 countries of the world (Human Development Index Ranking, 2020).
In table 1, the Human Development Index (HDI) and the components thereof for Iran have been compared with Japan\(^1\) and Finland\(^2\):

Table 1: Human Development Index (HDI) Ranking

<table>
<thead>
<tr>
<th>Rank</th>
<th>Country</th>
<th>HDI Value (2019)</th>
<th>Life expectancy (years)</th>
<th>Expected years of schooling (years)</th>
<th>Mean years of schooling (years)</th>
<th>Gross national income (GNI) per capita (PPP$) SDG8.5</th>
</tr>
</thead>
<tbody>
<tr>
<td>70</td>
<td>Iran</td>
<td>0.783</td>
<td>76.7</td>
<td>14.8</td>
<td>10.3</td>
<td>12,447</td>
</tr>
<tr>
<td>19</td>
<td>Japan</td>
<td>0.919</td>
<td>84.6</td>
<td>15.2</td>
<td>12.9</td>
<td>42,932</td>
</tr>
<tr>
<td>11</td>
<td>Finland</td>
<td>0.938</td>
<td>81.9</td>
<td>19.4</td>
<td>12.8</td>
<td>48,511</td>
</tr>
</tbody>
</table>

In compliance with table 1, there is a remarkable difference between HDI Value and GNI Per Capita of Iran with Japan and Finland. Since the real wealth of every country is not the natural resources but the manpower thereof so adopting and performing an

\(^1\) Based on the statistics made by the Organization for Economic Co-operation and Development (OECD), Japan stands first among 35 rich countries of the world for arranging the educational justice (Semuels, 2017).

\(^2\) In terms of educational quality Finland has gained the first rank and it has been a pioneer in this regard for many years and among the world's educational systems and Finland's educational system has invariably become as one of the most successful educational systems of the world (Garner, 2015).
appropriate strategy through paying more attention to the education and training and honouring the human's position which is assumed as investing for creating the sustainable development accordingly, paying attention to the indexes such as Government Effectiveness (One of the Indicators of the Governance, Misery Index and Legatum Prosperity Index) will be necessary. In table 2, the values of considered indexes related to Iran, Japan and Finland have been compared in 2019:

Table 2: Government Effectiveness, Legatum Prosperity Index, Inequality in Education

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Iran</td>
<td>-0.55</td>
<td>48.12</td>
<td>5</td>
</tr>
<tr>
<td>Japan</td>
<td>1.59</td>
<td>77.27</td>
<td>4.7</td>
</tr>
<tr>
<td>Finland</td>
<td>1.93</td>
<td>83.05</td>
<td>2.2</td>
</tr>
</tbody>
</table>

According to table 2, the broad difference is now observed among the considered indexes of Iran with Japan and Finland.

Referring to the foregoing topics we can reach to this significant matter that Iran's management and method of governance can have a basic role in creating the total structure and appropriate educational mechanism and the possibility of achieving to the SDG4 can be done through the poverty reduction and gaining relative prosperity and the possibility of establishing a sustainable development can be also provided. Since no studies have been done so far concerning the SDG4 in Iran and the effects of Iran's method of governance on this important objective, therefore our objective of such study is to review the effects relevant to the method of governance on SDG4 in Iran.
MATERIALS AND METHOD

THEORETICAL FOUNDATIONS

With regards to the foregoing topics that we formerly discussed about this result can be achieved that there are a kind of bilateral interaction and regular and supportive engagement. This bilateral interaction and regular and supportive engagement can be possible only with the presence of a responsible and efficient governor who pays enough attention to education and training and also the one who honours to the human being's position. On the other hand, the considered governance designs an interaction circuit through legal and financial support into the educational system so that a qualified, inclusive and comprehensive could be able to possess the same. Such interaction can be simulated to the components of one electrical circuit wherein one educational system can act as a capacitor and governance as a battery that presents the financial and legal supports needed for increasing the education quality and inclusion thereof to the said educational system. For this reason, the theoretical foundations of such plan have been taken into account based on the method of calculating the amount of potential energy stored in the capacitor in physics and as an integration strategy between governance and education. A capacitor is used as an electrical device for storing the electrical load and energy. This process can be completed through two conductive screens and are connected to a battery's terminal. In accordance with the energy conservation rule, the energy which has been transferred by the battery to the screens will not be wasted and accordingly stored on the said screens:

\[ v = \frac{u}{q} \]  

(1)

Wherein: \( v \): Voltage, \( u \): Energy, \( q \): Electric charges
The amount of potential energy stored in the capacitor is the required amount of work for loading the capacitor which is stored between the screens of a capacitor in the form of electrical potential energy and then it is returned to the circuit at the time of discharging the capacitor and voltage is a driving force which causes the creation of an electrical current in a circuit.

\[ U = \frac{1}{2} QV = \frac{1}{2} CV^2 = \frac{1}{2} \frac{Q^2}{C} \]  

(2)

Wherein: \( U \): Capacitor energy, \( Q \): Electric charges, \( V \): Voltage, \( C \): Capacitance

Applying the logarithm operation from the equation (2) and then changing the same to a linear econometric relationship for the estimation purpose, the modified capacitor energy model will be gained as disclosed below:

\[ \ln U_{ij} = \alpha \ln Q_{ij} + \beta \ln V_{ij} + \varepsilon_{ij} \]  

(3)

\( Q_{ij} \) denotes the main variables, \( V_{ij} \) denotes the supportive variables, \( \alpha \) and \( \beta \) as estimated parameters and \( \varepsilon_{ij} \) introduces the error term with a normal distribution.

**SPECIFY MODEL**

Given that the objective of such this essay is to review the effects of the governance method on SDG4 in Iran accordingly the equation (3) has been specified as disclosed below:

\[ ined_i = \alpha + \beta_1 gni_i + \beta_2 lfix_i + \beta_3 gee_i + \beta_4 gcg_i + \beta_5 edin_i + \beta_6 upop_i \]

\[ + \beta_7 exys_i + \gamma_1 lpin_i + \gamma_2 goef_i + \varepsilon_i \]  

(4)
Wherein:

- \( ined_i \): Inequality in Education\(^3\) (%): SDG4
- \( gni_i \): Gross National Income (GNI) per capita (constant 2017 PPP$): SDG8.5
- \( liex_i \): Life Expectancy at Birth (years): SDG3
- \( gee_i \): Government Expenditure on Education (% of GDP): SDG1.a
- \( gcf_i \): Gross Capital Formation\(^4\) (% of GDP)
- \( edin_i \): Education Index\(^5\)
- \( upop_i \): Urban Population (%)
- \( exys_i \): Expected Years of Schooling (years): SDG 4.3
- \( lpin_i \): Legatum Prosperity Index
- \( goef_i \): Government Effectiveness (one of the Worldwide Governance Indicators (WGI))
- \( \epsilon_i \): Error Terms

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\(^3\) Definition: Inequality in distribution of years of schooling based on data from household surveys estimated using the Atkinson inequality index (Human Development Report, 2020).

\(^4\) Definition: Outlays on additions to the fixed assets of the economy plus net changes in inventories. Fixed assets include land improvements (such as fences, ditches and drains); plant, machinery and equipment purchases; and construction of roads, railways and the like, including schools, offices, hospitals, private residential dwellings and commercial and industrial buildings. Inventories are stocks of goods held by firms to meet temporary or unexpected fluctuations in production or sales as well as goods that are work in progress. Net acquisitions of valuables are also considered capital formation. Gross capital formation was formerly known as gross domestic investment (Human Development Report, 2020).

\(^5\) Definition: Education index is an average of mean years of schooling (of adults) and expected years of schooling (of children), both expressed as an index obtained by scaling with the corresponding maxima (Human Development Report, 2020).
We use the Generalized Method of Moments (GMM) for estimating the foregoing model. Such this method provides the usage possibility of one dynamic model applying the instrumental variables.

**MODEL DATA**

The model data of this research have been derived from a database named World Bank, Human Development Reports and Legatum Institute within the time interval of 1990 to 2019. The considered data with the relevant bases are separately explained as disclosed below:

<table>
<thead>
<tr>
<th>Data</th>
<th>Abb.</th>
<th>Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dependent Variable:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Inequality in education (%)</td>
<td>ined</td>
<td>Human Development Reports</td>
</tr>
<tr>
<td>(Dimension: Inequality)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Independent Variables:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Gross National Income (GNI) per capita</td>
<td>gni</td>
<td>Human Development Reports</td>
</tr>
<tr>
<td>constant 2017 PPP$)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dimension: Income/composition of resources (SDG 8.5)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Life Expectancy at Birth (years)</td>
<td>liex</td>
<td>Human Development Reports</td>
</tr>
<tr>
<td>Dimension: Health (SDG 3)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Government Expenditure on Education (%) of GDP</td>
<td>gee</td>
<td>Human Development Reports</td>
</tr>
<tr>
<td>Dimension: Education (SDG 1.a)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Gross Capital Formation (%) of GDP</td>
<td>gcf</td>
<td>Human Development Reports</td>
</tr>
<tr>
<td>Dimension: Socio-economic sustainability</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Education Index</td>
<td>edin</td>
<td>Human Development Reports</td>
</tr>
<tr>
<td>Dimension: Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Expected Years of Schooling (years)</td>
<td>exys</td>
<td>Human Development Reports</td>
</tr>
<tr>
<td>Dimension: Education (SDG 4.3)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Urban population (% of total population)</td>
<td>upop</td>
<td>World Bank</td>
</tr>
<tr>
<td>- Government Effectiveness</td>
<td>goef</td>
<td>World Bank</td>
</tr>
<tr>
<td>- Legatum Prosperity Index</td>
<td>lpin</td>
<td>Legatum Institute</td>
</tr>
</tbody>
</table>

**CORRELATION COEFFICIENT**

In table 3, the test result of the correlation coefficient has been demonstrated between
the dependent variable of Inequality in Education (ined) with the independent variables. According to the considered results, the dependent variable is of the following correlations with the independent variables:

- **Strong positive correlations** with Life Expectancy at Birth, Legatum Prosperity Index, Education Index, Urban Population, Expected years of schooling (years)
- **Weak positive correlations** with Gross National Income (GNI) per capita, Government Effectiveness
- **Strong negative correlation** with Gross Capital Formation
- **Weak negative correlation** with Government Expenditure on Education

Table 3: Correlate Test

<table>
<thead>
<tr>
<th></th>
<th>ined</th>
<th>gni</th>
<th>liex</th>
<th>gee</th>
<th>lpin</th>
<th>goef</th>
<th>gcf</th>
<th>edin</th>
<th>upop</th>
<th>exys</th>
</tr>
</thead>
<tbody>
<tr>
<td>ined</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>gni</td>
<td>0.0033</td>
<td>1.000</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>liex</td>
<td>0.8857</td>
<td>0.1493</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>gee</td>
<td>-0.1043</td>
<td>0.7282</td>
<td>0.1142</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>lpin</td>
<td>0.6712</td>
<td>0.0836</td>
<td>0.8562</td>
<td>0.3703</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>goef</td>
<td>0.0953</td>
<td>-0.6243</td>
<td>0.0149</td>
<td>-0.6583</td>
<td>0.0037</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>gcf</td>
<td>-0.6037</td>
<td>-0.4254</td>
<td>-0.7340</td>
<td>-0.2465</td>
<td>-0.4337</td>
<td>0.4222</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>edin</td>
<td>0.8233</td>
<td>-0.1510</td>
<td>0.8993</td>
<td>-0.1796</td>
<td>0.7841</td>
<td>0.3919</td>
<td>-0.4977</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>upop</td>
<td>0.8550</td>
<td>0.2217</td>
<td>0.9935</td>
<td>0.2143</td>
<td>0.8762</td>
<td>-0.0857</td>
<td>-0.7578</td>
<td>0.8557</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>exys</td>
<td>0.7152</td>
<td>-0.2436</td>
<td>0.7964</td>
<td>-0.2807</td>
<td>0.7060</td>
<td>0.5292</td>
<td>-0.3597</td>
<td>0.9788</td>
<td>0.7414</td>
<td>1.000</td>
</tr>
</tbody>
</table>

**RESULTS OF MODEL ESTIMATION**

In table 4, the test result of the unit root test has been demonstrated. According to the above table, all variables are stationary at level I(0).
Table 4: Phillips-Perron test for unit root

<table>
<thead>
<tr>
<th>Variables</th>
<th>Result</th>
<th>Variables</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ined</td>
<td>0.015</td>
<td>goef</td>
<td>0.006</td>
</tr>
<tr>
<td>Gni</td>
<td>0.000</td>
<td>gcf</td>
<td>0.008</td>
</tr>
<tr>
<td>Liex</td>
<td>0.000</td>
<td>edin</td>
<td>0.000</td>
</tr>
<tr>
<td>gee</td>
<td>0.000</td>
<td>upop</td>
<td>0.000</td>
</tr>
<tr>
<td>lpin</td>
<td>0.021</td>
<td>exys</td>
<td>0.000</td>
</tr>
</tbody>
</table>

The results of model estimation using the GMM method (Table 5) shows that the Gross National Income (GNI) Per Capita, Government Effectiveness, Legatum Prosperity Index, Life Expectancy at Birth, put a negative effect but Urban, Education Index, Gross Capital Formation, Government Expenditure on Education and Urban Population all put a positive effect on the inequality in education.

The negative effect of some variables such as Legatum's variables, Life Expectancy at Birth, Gross National Income (GNI) per capita, Government Effectiveness, prosperity index on the inequality in education shows that Iran's governance for the realization of SDG4 with the different challenges in the economic, social and environmental aspects that the government is now facing with (Bahaee and Pisani, 2009; Azadi, 2019; Jariani, 2021). Therefore, Iran's governance can materialize SDG4 in Iran by adopting an integration strategy and appropriate to the aim of increasing the education quality and decreasing the inequality in education (Ahlberg, M., Aanismaa, P., & Dillon, P., 2005, Corcoran and Walls, 2004, Cortese, 2003). The positive effect of some variables such as Education, Gross Capital Formation, Government Expenditure on Education and Urban Population index on the inequality in education are indicative of insufficient attention of governance to the education and the failure of a total structure and an appropriate mechanism (Cortese, 2003) is for removing
the educational discrimination that Iran's human development index value can confirm the same.

Table 5: Instrumental variables (GMM) regression

<table>
<thead>
<tr>
<th>Variables</th>
<th>Result</th>
<th>Variables</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>gni</td>
<td>-57.69</td>
<td>goef</td>
<td>-6.92</td>
</tr>
<tr>
<td></td>
<td>(0.000)</td>
<td></td>
<td>(0.000)</td>
</tr>
<tr>
<td>liex</td>
<td>-21.85</td>
<td>gcf</td>
<td>26.45</td>
</tr>
<tr>
<td></td>
<td>(0.000)</td>
<td></td>
<td>(0.000)</td>
</tr>
<tr>
<td>gee</td>
<td>39.36</td>
<td>edin</td>
<td>16.40</td>
</tr>
<tr>
<td></td>
<td>(0.000)</td>
<td></td>
<td>(0.000)</td>
</tr>
<tr>
<td>lpin</td>
<td>-39.67</td>
<td>upop</td>
<td>37.32</td>
</tr>
<tr>
<td></td>
<td>(0.000)</td>
<td></td>
<td>(0.000)</td>
</tr>
<tr>
<td>Number of obs</td>
<td>9</td>
<td>R-squared</td>
<td>0.9915</td>
</tr>
<tr>
<td>Prob &gt; chi2</td>
<td>0.0000</td>
<td>Root MSE</td>
<td>0.25461</td>
</tr>
</tbody>
</table>

Instrumented: upop
Instruments: gni liex gee lpin goef gcf edin exys
HAC VCE: Bartlett kernel with 1 lag

The results of the Hausman Test denote that due to the test statistical value which is equal to 1138/88 and it is located in the critical zone (The probability value is smaller than 0/05) therefore, the non-correlation hypothesis of x and u will be rejected.

On the other hand, x is endogenous so we are required to apply the instrumental variables:

Table 6: Hausman Test

<table>
<thead>
<tr>
<th>Test: Ho: difference in coefficients not systematic</th>
</tr>
</thead>
<tbody>
<tr>
<td>$\text{chi}^2(6) = (b-B)'<a href="b-B">(V_b-V_B)^{-1}</a>$</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>$= 1138.88$</td>
</tr>
<tr>
<td>$\text{Prob} &gt; \text{chi}^2 = 0.0000$</td>
</tr>
</tbody>
</table>

CONCLUSION

Education is assumed as one of the intrinsic and fundamental rights of all individuals and as a tool for improving the social skills during the life and also the most powerful
tool for the sustainable development because without an appropriate education, there would be no possibility to get riddance of poverty, hunger, malnutrition, diseases and mortality and inequality reduction. Accordingly, we can't achieve to the sustainable development, protecting our earth and arranging a perpetual peace in the world without an appropriate education. For this reason and in this study, we reviewed the effects of the governance method on SDG4 here in Iran for the first time. In this research, we applied the Inequality in Education index as one dependent variable and Gross National Income (GNI) Per Capita, Government Effectiveness, Legatum Prosperity Index, Life Expectancy at Birth, Urban, Education Index, Gross Capital Formation, Government Expenditure on Education and as independent variables within the time interval of 1990 to 2019 and for estimating the considered model.

The absolute value of correlation coefficients (Table 3) denotes that Gross Capital Formation, Life Expectancy at Birth, Legatum Prosperity Index, Urban Population, Education Index all are of a strong relationship with the Inequality in Education whereas the Gross National Income Per Capita (GNI), Government Effectiveness, Government Expenditure on Education, are of a weak relationship therewith.

The results of the model estimation of (Table 5) shows that Life Expectancy, Gross National Income Per Capita (GNI), Government Effectiveness, Legatum Prosperity Index, Life Expectancy at Birth may cause a reduction in the Inequality in Education whereas Gross Capital Formation, Government Expenditure on Education, Urban Population all will increase thereof.

The foregoing results show that there is a weak relationship among the Government effectiveness, Government Expenditure on Education with the Inequality in Education due to insufficient attention of governance into the removal of educational
discrimination and also improving the economic, social and cultural abilities. Also, there is a weak relationship between the Gross National Income (GNI) Per Capita with the Inequality in Education which can be indicative of the low quality of education in the educational centers. Accordingly, those families that are of the lower affordability will be liable to the educational discrimination.

Therefore, the governance in Iran can materialize SDG4 in Iran through increasing the prosperity level and improving the education quality (Graders & Students) and increasing the qualification level of (Teachers & Professors) and with the aim of the lasting and sustainable educations and based on experience, participation, practice and research, (Bosselmann 2001, Christie et al., 2013) and the governance in Iran can also materialize the SDG4 in Iran and then propel the sustainable development realization in Iran towards the reality through improving Iran's human development index. The government can also accelerate the SDG4 realization through performing the total structure, applying a suitable mechanism, an appropriate budget allocation by the equitable distribution of educational facilities and enjoying some appealing educational method.

**PROPOSED SCENARIO**

School and university are among the main and important centers in a society therefore a change will be necessary in the glance of Iran's governance into the social problems. In addition to this matter, the inequality in education makes the materialization of sustainable development objectives impossible but it may lead to some consequences as disclosed below:

- The youth's deprivation from the social opportunities and continuation of inequality,
• Gini coefficient and poverty increase which put a remarkable effect on the education, health and food,

• Gender gap increase

Therefore, the government will be required to adopt an appropriate strategy for reducing the Inequality in Education so that this could lead to a decrease in the number of those students who are not interested to continue their studies and also increasing the quality of education including:

• Reduction of Poverty & Destitution

• Reduction of Urbanization Growth

• Equitable Distribution of Educational Facilities

• Appealing Educational or Teaching Method

• Allocating Enough Budget for Reconstructing the Schools Especially the Unsafe Ones

• Allocating more Facilities to the Poor Families and Deprived Areas
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