

The Impact of National Initiative for Human Development on Economic Growth of Morocco

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Abstract: This research deals with the program of the National Initiative for Human Development, a social project aim to improving the standard of living of Moroccans by fighting poverty, combating social exclusion, supporting income-generating activities, caring for women, children and people in difficult situations. The study examines the impact of the National Initiative for Human Development on Moroccan economic growth from 2006 to 2017, which is the period that combines the first and second phases of this program. Literature Reviews that dealt with the relationship between human development and economic growth were also highlighted. Secondary data was used based on World Bank reports in this regard, and the investment budget for the National Initiative for Human Development was based on reports of the National Coordination of the Initiative (Moroccan Ministry of Interior). By error correction model, it was found that there is a long-term positive relationship between investment in the national initiative for human development (INDH) and Moroccan gross domestic product (GDP). The conclusion from this relationship is that strengthening the role of the national initiative, as a tool for economic and social reform will positively affect GDP and the Moroccan economy in general.

Keywords: INDH, Human Development, Economic Growth, GDP

1. Introduction

The National Initiative for Human Development is a community project to improve the social and economic conditions of Moroccans, and it is a royal vision to achieve spatial justice and combat social differences. The National Initiative for Human Development (INDH) is a national production, and a new way of managing public affairs and making human at the center of attention. The initiative works in a parallel and participatory manner with government programs. Today, the National Initiative projects have reached all regions of the Kingdom. In implementation of the General Instructions of King Mohammed VI, the National Initiative projects began in 2005 after the royal speech, which was the cornerstone. [1]

The initiative aims to:

- 1) Fighting poverty and social exclusion.
- 2) Enhance the dignity of the citizen.

- 3) Raise the standard of living.

The projects of INDH:

- 1) Support basic infrastructure.
- 2) Training and professional formation.
- 3) Social, cultural and sports activities.
- 4) Promote income-generating activities.
- 5) Care for the woman, child and people in a difficult situation.

The initiative works through four programs to target people concerned:

- 1) Program to fighting poverty in rural areas.
- 2) Program to combat social exclusion in urban areas.
- 3) The program of caring for people in a difficult situation (urban and rural areas).
- 4) Horizontal Program: It concerns all non-target rural and urban groups. (Exceptional projects [1]. By the end of 2017, the number of projects for the initiative reached 49 thousand projects with an investment of 43 billion dirhams between 2005 and 2018 [1]. The main question

that I will try to answer in this research is to what extent did the National Initiative for Human Development contribute to improving the economy of Morocco?

2. Literature Reviews

2.1. HD and EG in Nigeria

This study from Eastern Mediterranean University highlighted the relationship between human development indicators and economic growth in the Republic of Nigeria between 1970 and 2011. They used the application of Johansen Co-integration technique and Error Correction model. As for human development variables, they have relied on the three indicators of human development for their study namely health, education and income, which are approved by the United Nations.

In this study, the analysis of co-integration gives a long-term relationship between these indicators and economic growth. The study also shows that the greatest impact on GDP among the indicators of human development was from the educational aspect, in addition to some evidence that the inequality in income affects the level of economic growth. Therefore, the greater inequality in income and in the mortality rate has a negative impact on GDP of the Republic of Nigeria.

Therefore, this study shows the importance of the role of human development in the economic fabric, and it is the main engine of the economy, because the improvement of human life in most will have a positive impact on the movement of trade and the economy in general. [2]

2.2. The Link Between HD and EG in Asia

This joint work between Oxford University, Yale University and the United Nations Development Program (UNDP) examines the links between human development and economic growth by putting two series, the first one is from human development into economic growth and the second from economic growth to human development. It studies the links within these chains and their relationship to each other, based on statistics between 1970 and 1992 in 15 Asian countries. As for the result, there was a positive relationship in both directions, and government investment in social services and education for females gives a strong link between human development and economic growth. On the other hand, the rate of investment in general and income distribution increases the relationship between human development and economic growth.

It also highlights the changes that take place over time in the classification of countries, by classifying them in the category of vicious or virtuous. For countries where economic growth is favored, it inevitably joins the evil category. On the other hand, countries that prefer human development have more chances to go to the virtuous category. Although it is important to give attention to economic growth and human development together, the human development must be given the utmost importance,

which is the foundation. [3]

2.3. Human Capital and Economic Development in Greece

This paper highlights the link between human capital and economic growth in Greece. In this research, it assumed that the field of education is the main driver of human development in this country, so here they examine the long-term relationship between the educational variables and the gross domestic product in addition to the causal trend between them. With using Cointegration analysis, the results obtained from this study show that there is a common relationship between the educational field through primary, secondary and higher education and the gross domestic product per capita, so the more investment in education, the more positive it will affect Greece's gross domestic product. In addition to the causal relationship. The field of education is one of the elements on which UNDP depends on its assessment of the level of human development in countries, and the research has been able to find a relationship between one component of human development and the economic level passing through educational variables of economic growth. [4]

2.4. Human Capital in Pakistan

Human capital is the real capital of peoples. In general, human capital is a fundamental contributor to economic development in all countries and without exception. In this joint work between the University of Karachi and the University of iqra in Karachi studied the links between human capital and the economy in Pakistan between 1978 and 2007, and Time series data were used in this period. The paper used Health adjusted Education Index of Human Capital in the standard of Cobb-Douglas production function, which showed a strong and positive relationship to human capital and the Pakistani economy. Then, in order to ascertain the extracted results, sensitivity analysis was used, which in turn confirmed the previous positive results. That is, this component (the indicator of health-adjusted education) plays an important role in growth in this Asian country. It is therefore clear here that health, education and other factors must be improved in order to sustain economic growth, especially in the long term. This research showed that attention to human is the basis for achieving real development in the social and economic field. [5]

2.5. Human Rights Within HD and EG

In this vision, human development is an opportunity to guarantee human rights, and this concept falls within the real elements of economic development. One of the goals of human development is to raise the level of freedom and rights, and thus these rights represent an opportunity to improve the social systems, economic and laws framed within countries. There is a positive relationship between education and welfare, but this welfare does not only mean the economic aspects, but it has other meanings such as freedom. Economic growth means mainly the increase in

income and the increase in the revenues of countries and societies, but in contrast, the meaning of human development is more, it means raising the quality of social, economic, cultural, political and human rights as well as public services. So, the increase in income is a means of human development, but there are other elements as mentioned above. Therefore, a strong economy depends on a strong society. There is a clear relationship between individual freedom and economic development. Once we look at the international economic and social indicators, the more individual freedom has a positive effect on the level of per capita income; the economic growth may not mean that there is real human development. For example, some of the rich countries in the Middle East have a GDP per capita of more than 70,000 dollar, but their indicators of individual freedoms are very modest. Human rights are the basis for improving the standard of living and raising the income of the individual, and is one of the pillars that achieve human development. [6]

2.6. Human Development in Europe

This research was carried out by the EU Publications Office, which spoke about the role of human development in improving the economy. This study was conducted in the following countries: Denmark, Finland, Greece, Spain, Ireland, Italy, Luxembourg, the Netherlands, France, Austria, Portugal, Belgium, Sweden, Germany and the UK. The study concluded that the regions that have high rates of investment in higher education focus their work on technology and modern industries, which in turn have a demand at the international level and thus contribute to the commercial mobility in these countries. There is also no correlation between the level of tertiary education and traditional and handicraft industries in these countries. Another point is that there is a link between the higher education level and high positions in companies and entrepreneurship in the fields of information technology and communications, which are increasingly in demand in modern life, As well as lower unemployment rates in these areas compared to other European regions. It is clear that these high rates of education help to create an environment for research and development that inevitably contributes to the development of the level of production, especially in the most important sectors such as technology and heavy industries. [7]

3. Methodology

1) Data

For the research methodology, I will use secondary data, which are data according to the reports of the High Commissioner for Planning (Morocco) and the World Bank for the gross domestic product. The budget of the National Initiative for Human Development is based on the general coordination reports of the National Initiative for Human Development of the Ministry of Interior. Therefore, quantitative data will be used to calculate the impact of the National Initiative on the GDP of the Kingdom of Morocco.

2) Building Model

We dispose of 24 observations related to two quantitative variables:

INHD's budget: The National Initiative Human Development budget. (X)

GDP: The percentage of change in GDP of morocco. (Y)

The model is specified below:

$$\Delta Y_t = \alpha_0 + \gamma(Y_{t-1} - n_2 X_{t-1}) + n_1 \Delta X_t + \xi_t$$

Our base model is error correction model (ECM) to explain the Gross domestic product of morocco (GDP) using the explicative (predictor) variable previously mentioned (NIHD's budget). The error correction model is used to estimate short- and long-term effects of a time series on the other; also, it is known as co-integration. It is suitable for studying the long-term relationship between variables. In addition, this model can stimulate flexibility by combining dynamic and long-term equilibrium models into a unified system [8]. We use the dickey Fuller test to determine the stationarity in the time series, to determine whether they are stationary or not stationary. Dickey Fuller test to study cointegration in the variables in time series [9].

We are going to use Logarithm of variables, in order to reduce problems like, heteroskedasticity and to have a model that fit better.

The coefficient γ , has an apriority expectation of a negative sign and is used to test for long run equilibrium. It also shows the rate at which changes in GDP would require to correct disequilibrium created by changes in NIHD's budget. On the other hand, the coefficient, n_1 , shows the short run equilibrium connecting both variables. Other variables were also estimated such as R-square: which measures how much changes in the dependent variable are attributable to changes in the independent variable. The t-statistics and their respective probability values were also computed to in informing the researchers about the statistical reliability of the coefficients estimated, and was tested at 5% level of significance.

3) Interpretation and result

The table below shows that the percentage change in the budget of the national initiative (X) is -10.067 and is smaller than the critical value, which is -1.9572 (dickey fuller test) so it is stationary. On the other hand, the percentage of change in the GDP of Morocco (Y) is -13.97, it is smaller than the critical value, and therefore is stationary (dickey fuller test).

The table below shows (Dickey-Fuller) that the national initiative and the percentage of change GDP took -7.99, which is smaller than the critical value (-2.6742) here, so they are cointegrated. Which means there is a long-term relationship.

The calculated t- statistics of 1.30 was found to be non-significant at 5% level of significance as the probability value reads 0.204. The trend for both variables is presented below.

As a result, based on the error correction model and as shown in the table below, there is a long-term positive relationship between the INDH and Morocco's GDP. It's

significant at 1%, 5% and 10%. The long run equilibrium coefficient was significant. The conclusion from this relationship is that strengthening the role of the national initiative, as a tool for economic and social reform will positively affect GDP and the Moroccan economy in general. It may not be clear that there is a clear relationship in the short term, but it turns out that this national project has an

opportunity and an important role to improve the economy and the standard of living of Moroccans, especially in the long term. The result of this relationship is consistent with the vision of King Mohammed VI, who wanted the National Initiative for Human Development to be a project for the current and future generation and not only to repair some problems in society at the moment.

Table 1. Error correction model.

| Stationarity (lags 1) Dickey-Fuller (5%) (n=22) (Model= no constant and no trend) has critical value = -1.9572 | | |
|--|---------------------------------|--------------------------------|
| | % change in NIHD's budget (X) | % change in GDP (MAD) Y |
| Coefficient | -1.65 | -1.75 |
| t stat | -10.07 | -13.97 |
| | -10.07 < -1.9572 so stationary | -13.97 < -1.9572 so stationary |

Paper

Optimized Dickey-Fuller Test Refines Sign and Boundary Problems Compare to Traditional Dickey-Fuller Test

| cointegration Dickey-Fuller (1%) (n=22) (Model= no constant and no trend) has critical value = -2.6742 | |
|--|---------------------------------|
| t stat | -7.99 |
| | -7.99 < -2.6742 so cointegrated |
| SUMMARY OUTPUT error correction model | |

| Regression Statistics | |
|-----------------------|-------------|
| Multiple R | 0.892231798 |
| R Square | 0.796077581 |
| Adjusted R Square | 0.774612063 |
| Standard Error | 0.190772591 |
| Observations | 22 |

| ANOVA | | | | | |
|------------|----|-------------|----------|-------------|----------------|
| | df | SS | MS | F | Significance F |
| Regression | 2 | 2.699454267 | 1.349727 | 37.08634416 | 2.75E-07 |
| Residual | 19 | 0.691489445 | 0.036394 | | |
| Total | 21 | 3.390943712 | | | |

| | Coefficients | Standard Error | t Stat | P-value | Lower 95% | Upper 95% | Lower 95.0% | Upper 95.0% |
|-----------|--------------|----------------|----------|-------------|-----------|-----------|-------------|-------------|
| Intercept | -0.073816526 | 0.042466909 | -1.73821 | 0.09835367 | -0.1627 | 0.015068 | -0.1627 | 0.015068 |
| Y-X | -1.110567362 | 0.226512205 | -4.9029 | 9.87877E-05 | -1.58466 | -0.63647 | -1.58466 | -0.63647 |
| Delta X | 0.797376928 | 0.092610404 | 8.610015 | 5.53273E-08 | 0.603541 | 0.991213 | 0.603541 | 0.991213 |

4) Limitations

We do not have more details about the budget of INDH like budget by region or by program.

There others factors that affect GDP such as, inflation, interest rate, unemployment and population.

4. The Discussion

Overall, there is a positive relationship between INDH and Moroccan GDP. The observation began from 2006 to 2017, so it was twice a year, 24 observations in this period. The investment of the national initiative in the first half of 2006 was 600 million dirhams, and then moved to 1.6 billion dirhams in 2012, and reached to 3.4 billion dirhams in the first half of 2017. While the gross domestic product gross in the two parts in 2006 was 78 billion dollars and then moved to almost \$ 100 billion in the two parts of in 2012. Gross domestic product reached \$ 118 billion at the end of 2017. However, this project targeted more than 10 million

Moroccans and was expected to contribute significantly to raising the standard of living and to have a greater impact on the national economy, but there are other factors that may affect Moroccan GDP. As mentioned above.

The importance of the national initiative is reflected in the fact that it is direct way to improve human life in the short and medium term. Therefore, despite the achievements of the National Initiative for Human Development, the Moroccan GDP is still modest compared to the efforts made, which raises many questions about the effectiveness of government action in general and social programs in particular. The low rank of Morocco in the Human Development Index of the United Nations also raises many questions, although Morocco has a special project (INDH) for human development but it ranked 123 out of 188 countries in 2017 in this index, and maintained the same rank in 2021, while it was ranked 130 in 2011. On the other hand, there are countries neighboring Morocco that are ranked better, such as Tunisia and Egypt, although they do not have a program

dedicated to human development like this one in Morocco [10].

5. Recommendations

- 1) For income-generating activities, training programs should be established on how to manage microenterprises for those who will benefit from income-generating activities to increase the chances of success of their projects.
- 2) Diversifying business activities, striving for innovation and creativity and promoting commercial competition.
- 3) The role of the national initiative in education was limited to providing buses and student centers, but the initiative must accompany students in all aspects of education through guidance, study observation and psychological support.
- 4) Communication is still at the required level, it should be open to universities, schools and social media, and provide a comprehensive explanation of the role of the national initiative in society.
- 5) The base of partnerships between the National Initiative for Human Development and Moroccan universities should be expanded to conduct research and studies to provide innovative solutions and evaluate the effectiveness of programs.
- 6) It is still difficult to access data or evaluation studies of the national initiative, and the National Observatory for Human Development and the High Commission for Planning did not play the required role as it should. Studies and data must be published, updated and made available to everyone.

6. Conclusion

Solidarity is a means to connect societies and to help vulnerable groups to overcome difficulties, and this is what the National Initiative for Human Development is trying to do in our country. The concept of the National Initiative for Human Development embodies an obligation towards society to strive to combat harsh social phenomena. Regardless of the pros and cons of this initiative, it is a new way to interact with social problems and promote participatory action among all actors from government, local authorities and civil society associations. King Mohammed VI has always emphasized in his speeches the role of collective action and the involvement of civil society in the management of public affairs.

Today, many young people who suffer from a kind of social exclusion resort to the projects of the National Initiative for Human Development, especially in the rural areas in order to improve their standard of living. Therefore, the national initiative became one of the main means on which the government relies on this purpose.

Conflicts of Interest

The authors declare no conflicts of interest.

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