

В статье рассмотрены основные проблемы создания зоны свободной торговли между Украиной и ЕС. Определены риски, возникающие для Украины при подписании соглашения о ЗСТ+ и, в связи с этим, приоритеты формирования конкурентоспособности украинских предприятий.

#### **SUMMARY**

In the article the basic problems of creating a free trade zone between Ukraine and EU. Identified risks arising for Ukraine at the signing of an FTA +, and, in connection with this, the priorities of the competitiveness of Ukrainian enterprises.

### **THE IMPACT OF GLOBALIZATION ON HUMAN AND GENDER DEVELOPMENT IN EGYPT A STUDY COVERING THE PERIOD FROM (1982-2010)**

**Bassim M.A.**; B.Sc., M.Sc., Ph.d., Lecturer in Economics and Finance Modern Sciences and Arts University- 6 October City- Egypt

#### **Research Problem:**

Globalization is closely associated with the increase in trade, movement of capital, foreign investment and technological developments. This is dependent on the availability of Human Capital capable of achieving the development and the availability of active regulatory institutions in the country.

Development measuring has been redefined in the past decades to be in terms of reducing or elimination of poverty, inequality, and unemployment within the context of a growing economy. The Human Development Index was introduced in 1990 to include the parameters of long and healthy life, knowledge and a decent standard of living (measured by GDP/Capita (PPP)). The development of Human Capital by investing in education and health is an essential component of growth and development as inputs to the aggregate production function. A further refinement introduced the Gender Equality as the Millennium Development Goal number 3. The Gender Development Index is defined among other measures of equality.

The problem of this research is to identify and quantify the relationships between the Globalization and the Human and Gender development variables in Egypt.

#### **Review of literatures:**

The foundations of Economic Growth Theory were partly introduced by Ibn Khaldun, in his historical "Introduction to History" (Mokademat Ibn Khaldun) in 1377. He donated a vision of the causes of rise and fall of civilizations (Rosenthal, Routledge and Paul, 1958) (la Grandville, 2005) and considered that the human needs lead to the use of knowledge and intellect. He stated that higher productivity due to specialization and division of labor produce surplus products, which can be exported to other communities and creates wealth for the producers and increases the welfare of the community. He considered that there is a natural inheritance of skill but skills can also be gained through training and education (Cheddadi, 2000).

In the development of the historical economic trade theories which form the basis of today's Globalization, the Mercantilism encouraged the export of domestic goods and discouraged the availability of foreign goods (Kennett, 2004), (Husted and Melvin, 1995). This era was followed by Adam Smith (Parkin, 2008), (Mankiw, 2004) who promoted theories of international trade and attacked the Mercantilists. Smith's "Wealth of Nations" (1776) treated subjects such as the international division of labor and the importance of imports in improving the standard of living.

The increase in trade is considered as a result of the specialization, in line with the Classical Theory of Smith, Robert Torrens (1808) notion of comparative advantage, David Ricardo (1819) concept of Comparative Advantage which forms the basis of mutually beneficial trading relationship between developed and developing countries. Due to the inconsistency between the predictions and realities of the classical theory on comparative advantage, Heckscher-Ohlin (H-O) (1919-1933) (Salvatore, 2004) introduced a model of the patterns and determinants of international trade and its effects on the earnings of factors of production. The model provided an important insight into issues as the impact of economic growth on the pattern of international trade.

Recent theories of growth and development (Todaro and Smith, 2009) are related to the human capital, trade theory, and technological development effects. Solow Neoclassical Growth Model emphasized the importance of technological progress (Solow, 1956). Lewis provided the Structural Change Model where the accumulation of physical and human capital and a set of interrelated changes in the economic structure of a country are required for development (Lewis, 1954). The "International Dependence Revolution" model view developing countries to be dependant on and dominated by the rich countries reappeared in the twenty first century, in a modified form by anti-Globalization movement (Anderson, Cavanagh, Lee, 2000).

The "Neoclassical Counter Revolution Model" in the 1980's, called for free markets to draw domestic and foreign investment and privatization of public corporation. The new growth theory of Romer (Roemer, 1986) and Lucas (Lucas, 1988), has been a result of the free market reforms and liberalization of trade. These policies were impressed by the World Bank and IMF on highly indebted countries and were expected to prompt higher investment, raise

productivity and improve standard of living. However, many LDC's experienced little or no growth. The new growth theory provide more rigorous theoretical basis for the positive relationship between international trade and long-run economic growth.

The World Bank economists recommended in the 1990's that governments invest in education, and health care facilities to reduce the imperfections in LDC's. The United Nations Development Programs (UNDP) initiated in 1990 the Human Development Index to rank all countries based on three goals of development. The Human Development Index (HDI) measures longevity by life expectancy at birth, knowledge as measured by weighted average adult literacy and mean years of schooling, and standard of living as measured by real per capita GDP. Health and education are inputs into the national production function in their role as components of the Human Capital.

Several recent studies show a positive relation between the measures of Globalization in terms of trade, FDI, and the growth (Derher, 2006). Derher used an index of Globalization covering three main dimensions: Economic Integration, Social Integration, and Political Integration to measure the impact of Globalization on economic growth. He used data of 123 countries for the period 1970-2000 and concluded from the regression analysis of the countries that the more the country is integrated with Globalization the more it can increase its economic growth rate.

Panel data are used to examine the relationship between some dimensions of Globalization and growth. Dollar and Kraay found that an increase in trade flows and foreign direct investment resulted in higher growth rates (Dollar, David; and Kraay, 2001). Greenaway also reports a strong relationship between trade and growth (Greenaway, David; Morgan; and Wright, 1999). There is also evidence that Foreign Direct Investments (FDI) has a positive effect on growth in higher income countries, (Blomström, Magnus; Lipsey; Zejan, 1992) and a negative one in low income countries (Garrett, and Geoffrey, 2001). The effects of openness to international trade and foreign direct investment (FDI) on economic growth for the period 1980 to 99 are explored using panel data (Balioune, 2002). FDI was found to have a significant positive impact on economic growth. However, openness to trade did not seem to enhance growth in poor countries. Balioune empirical findings failed to prove the proposition that greater openness facilitated convergence to higher income levels.

Borensztein provided evidence of a positive growth subject to the availability of a minimum human capital (Borensztein, Gregorio; and Lee., 1998). Edison examined the relationship between the indicators of financial integration and growth and provided a detailed analysis showing that there is no robust relationship (Edison, J.; Klein; Ricci; Sløk, 2002).

Cecelski conducted a detailed investigation using a model for data on energy from 57 countries. She proved that there is a strong correlation between energy consumption per capita and economic development, growth, and several human development indices (Cecelski, 2005). The importance of this model is that it showed the impact of energy as an indicator of technology and Globalization on the Human and Gender development.

Sabi used the Economic Freedom Index (EFI) as a measure of Globalization in order to study the impact of Globalization on the human development (Sabi, 2007). The Human Development Index (HDI), Gender Disparity Index (GDI), and the Gini Index (GI) were used as measures of Human Development. The Regression Analysis conducted for each of these variables for the available country data showed that the (HDI) is influenced by the degree of (EFI) for higher income countries. For the less income group of countries it didn't demonstrate significance at any level. Similar relation was found for the (GDI). For the Gini Index the results were found to be difficult to interpret. The Adjusted-R<sup>2</sup> was found weak and the negative relation between the (EFI) and Gini Index meant that, Globalization may lead to additional income disparity. However, from the perspective of the author of this current paper, the (EFI) represents the components of the country's economic freedom and hence may not represent the Globalization accurately in all cases.

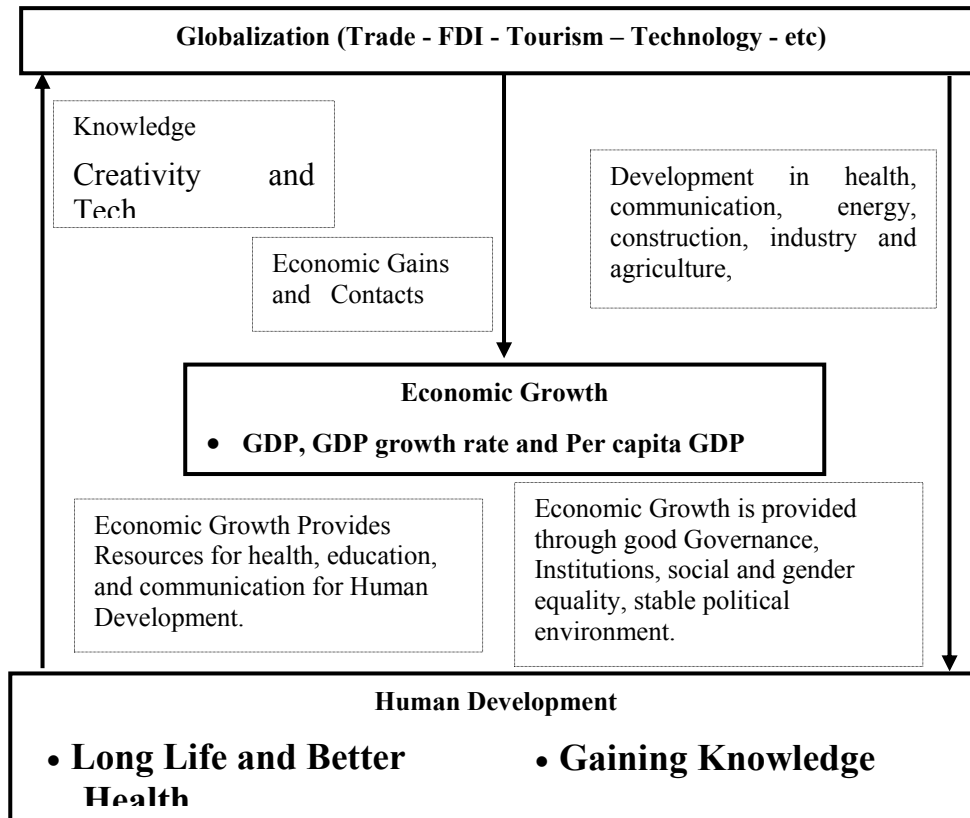
Minhaj, Ahmed & Siddiqua Hai studied the effect of Foreign Direct Investment on Human Development Index in Pakistan, where the regression analysis showed that there is a strong positive relationship between FDI and HDI. The paper concludes that FDI plays a vital role in the development of Pakistan, and greater inflow of FDI to the country will improve the socio economic conditions. Also, that FDI is not the sole determinant of HDI (Minhaj, Ahmed & Hai, 2007).

#### **Allocation of Unreserved Problem:**

From the above literature review of the Globalization, growth and development it appears that Globalization has positive effect on growth and development in a country in line with historical and theoretical treatments; however this is subject to the availability of a minimum level of human capital in that country. Figure 1 shows a schematic representation of the author's view of the model representing these relations.

#### **The purpose of the article:**

This paper, presents a model for the relation between Globalization and Human Development variables for Egypt based on published data from (1982-2010). The Globalization is considered to be the independent variable represented by trade, foreign direct investment, current transfers, portfolio investment, assets, tourism (IFS, different reports) and technology (represented by Electricity consumption in kilowatt/h per capita, and Telephone lines (Per 1000 People). Whereas, the Human and Gender Development variables are considered as the dependant variables and represented by Human Development Index (HDI) and Gender Development Index (GDI).



**Figure 1: Relations between Globalization and Human Development Variables**

**Results of Research**

All the variables were introduced in the model; however the following formulas include the variables which were found to be significant in the relations.

The first model represents the relation of Globalization variables and Human Development Index (HDI):

$$\begin{aligned} \text{Ln\_HDI} &= 0.20 \text{ Ln\_Currenttransfer}(-1) + 0.024 \text{ Ln\_portfolio}(-1) + 0.35 \text{ Ln\_Elect} - 2.2c \\ \text{SE} &= (0.043) \qquad \qquad \qquad (0.009) \qquad \qquad \qquad (0.057) \qquad (0.390) \\ \text{t-test} &= (4.716) \qquad \qquad \qquad (2.665) \qquad \qquad \qquad (6.206) \qquad (-5.646) \end{aligned}$$

R<sup>2</sup> = 0.85

The above equation showed that there is significant relationship between the dependent variable of Human Development Index and the independent variables Current Transfer after one year, Portfolio investment after one year and Electricity consumption (indicator of technology).

The second model represents the relation of Globalization variables and Gender Development Index (GDI):

$$\begin{aligned} \text{Ln\_GDI} &= 0.04 \text{ Ln\_Fdi} + 0.014 \text{ Ln\_Portfolio} + 0.13 \text{ Ln\_Tel} - 0.81c \\ \text{SE} &= (0.009) \qquad (0.002) \qquad \qquad (0.012) \qquad (0.061) \\ \text{t-test} &= (4.091) \qquad (7.315) \qquad \qquad (10.895) \qquad (-13.154) \end{aligned}$$

Co integration of GDI is at 5% level

R<sup>2</sup> = 0.99

In the above equation for the Gender Development, it is noticed that the variables which affects the GDI are FDI, Portfolio, and Telephones. The main effect is due to the Foreign Direct Investment variable (FDI).

As shown in the equation above R<sup>2</sup> is equal to 0.99. This means that 0.99 of the changes in GDI are explained by changes in FDI, Portfolio, and Telephones. This is an important result showing that the other variables of Economic Integration and Technological Achievements did not have effect.

**Conclusions and Offers (Recommendations):**

The econometric models help understanding which variables can be improved in the future in order to improve the dependent variables (Human and Gender Development variables). It is noticed that trade has no impact in both models. This can be explained to be due to Egypt's negative trade balance and it is therefore recommended that the trade balance should be improved considerably.

1. In the first model, the current transfer shows a higher effect on HDI as it consists of the remittances from Egyptian nationals working abroad, grants and nonrefundable donations for health services and education. The remittances in Egypt are considered the highest of GDP next to the total trade, and a large portion of the remittances is directed to health services and education. The portfolio investment reflects the companies' activities in the country and its appearance in the model indicates that the economy is in the right direction and that people are getting benefits from the portfolio investment which contributes to the increase in HDI. Also the  $R^2$  showed a high value, and that 0.85 of the changes in Human Development Index is explained by the changes in these variables.

Furthermore, other variables remaining constant, 1% increase in electricity consumption will result in 0.35% improvement in HDI. Electricity is one of the bases of development in Egypt and in other countries. The electrical consumption has grown seven times in Egypt in the period 1982 to 2004 (based on data from the UNDP reports of different years).

Similarly, other variables remaining constant, 1% increases in current transfer after a year will result in 0.2% improvement in HDI. The current transfers include remittances of Egyptian labor force working abroad, and also donations and non-refundable grants from governments of foreign countries for education and health. A portion of these are directed to health, education, better housing, etc and therefore the increase in Current Transfers improves the Human Development Index as indicated by the model. Portfolio Investment reflects the Companies' activities and the increase in the portfolio investment indicates the economy is moving forward in a correct way. This means that people income allows them to improve the living standards and this in turn improves the capability to spend on education.

2. In the second model, the time series was short and hence the effects of the variables appear low. The Foreign Direct Investments (FDI) are generally directed mainly to investments in new industries and technological developments which create new job opportunities for women and men. The effect of portfolio has been explained in the first model.

Similar to the analysis above, 1% increases in Foreign Direct Investment will result in 0.04% improvement in GDI holding all other variables constant. Also, 1% increase in portfolio investments will result in 0.014% improvement in GDI holding all other variables constant.

3. These results are for the historical data and improvement in the other variables of the Economic Integration and Technological Achievements could impact the GDI positively in the future.

Technology variables were weak and did not contribute to the models like for example Patents, R&D, Royalties, etc. should be stimulated by the government as a main source of increasing GDP and consequently human development. Solow indicated that technological advances account for 50% of the increase in the Gross Domestic Product in the United States. Also, Rahmesh assumed that the technological changes are exogenous changes and concluded that 50-87% of the growth in industrial developed countries was a result of these technology changes. The author therefore recommends that improving R&D is essential (Diwan and Chakraborty, 1991).

**REFERENCES:**

1. Khaldun, Ibn, *The Muquaddimah .An Introduction to History (1377)*, translation by Franz Rosenthal, Routledge and Kegan Paul, London 1958.
2. Oliver de la Grandville, "The 1956 Contribution to Economic Growth Theory – by Robert Solow: a Major Landmark and some of its undiscovered Riches", (2005)
3. Abdesselam Cheddadi, "IBN KHALDUN", UNESCO: International Bureau of Education, (2000).
4. 4 - David Kennett, "A New View of: Comparative Economics", 2<sup>nd</sup> Edition, (Thomson, 2004), P50.
5. Steven Husted and Michel Melvin "International Economics", 3<sup>rd</sup> Edition (Harper Collins College Publisher 1995), P59.
6. Michal Parkin, "Economics", 8<sup>th</sup> Edition (Pearson, 2008), P 54.
7. N. Gregory Mankiw, "Principals of Economics", 3<sup>rd</sup> Edition (Thomson, 2004), P 53.
8. Dominic Salvatore, " International Economics", 8<sup>th</sup> Edition (John Wiley & Sons, Inc. 2004), PP 115 - 146.
9. Michael P. Todaro and Stephen C. Smith, "Economic Development", Tenth Edition, (Addison- Wesley 2009), P109.

10. Solow, R., "A Contribution to the Theory of Economic Growth", *Quarterly Journal of Economics* 70: 65-94, (1956).
11. W, Arthur Lewis, "Economic Development with Unlimited Surplus of Labor", (Manchester School 22, May 1954), PP 139-191.
12. Sarah Anderson, John Cavanagh, Thea Lee, and the Institution for Policy Study," *Field Guide to the Global Economy*", (New York: New Press, 2000).
13. Roemer, P. "Increasing Returns and Long-Run Growth". *Journal of Political Economy*, (1986), 94: 1002-1037.
14. Lucas, R. "On the Mechanics of Development Planning". *Journal of Monetary Economics*, (1988)22: 3-42.
15. Axel Derher, "Dose Globalization Affect Growth? Evidence from a New Index of Globalization", TWI and University of Konstanz, (2006).
16. Dollar, David; Aart Kraay, "Trade, Growth, and Poverty", *World Bank Discussion Paper*, Washington, D.C. (2001).
17. Greenaway, David; Wyn Morgan; Peter Wright, "Exports, Export Composition and Growth", *Journal of International Trade & Economic Development*, (1999), 8, 1: PP 41-51.
18. Blomström, Magnus; Robert E. Lipsey; Mario Zejan, "What Explains Developing Country Growth?", *NBER Working Paper* 4132,(1992).
19. Garrett, Geoffrey, "The Distributive Consequences of Globalization", UCLA, MS,(2001).
20. Mina N. Balamoune, "Assessing the Impact of One Aspect of Globalization on Economic Growth in Africa", *United Nations University, World Institute for Development Economics Research, Discussion Paper No. 2002/91*,(2002).
21. Borensztein, E.; J. de Gregorio; J.-W. Lee., "How Does Foreign Direct Investment Affect Economic Growth? ", *Journal of International Economics*,(1998), 45: PP 115-135.
22. Edison, Hali J.; Michael Klein; Luca Ricci; Torsten Sløk, "Capital Account Liberalization and Economic Performance: Survey and Synthesis", *IMF Working Paper* 02/120, (2002).
23. Elizabeth Cecelski, "Energy, Development and Gender: Global Correlations and Causality", *Energia International Network on Gender and Sustainable Energy*, Netherlands, (2005).
24. Manijeh Sabi, "Globalization and Human Development", *International Conference on Globalization and Its Discontents*, Cortland, The Sage Colleges, USA,(2007).
25. Safia Qamar Minhaj, Roohi Ahmed & Seema Siddiqua Hai, "Globalization, Foreign Direct Investment and the Human Development Index: The Case of Pakistan", *University of Karachi. Pakistan, Unpublished Paper*, (2007).
26. *International Financial Statistics*, different years.
27. *United Nations Development Program, Human Development Reports*, different years.
28. Rahmesh Diwan and Chandana Chakraborty, *High Technology and International Competitiveness*, (Prager,1991).

## SUMMARY

The article is devoted to the estimation of the impact of globalization on human and gender development in Egypt from 1982 to 2010.

**Keywords:** human development, globalization, economic freedom index, human capital, gender equality/

## РЕЗЮМЕ

Статья посвящена оценке влияния глобализации на человеческое и гендерное развитие в Египте с 1982 по 2010 гг.

**Ключевые слова:** человеческое развитие, глобализация, индекс экономической свободы, человеческий капитал, гендерное равенство.

## РЕЗЮМЕ

Стаття присвячена оцінці впливу глобалізації на людський та гендерний розвиток в Єгипті з 1982 до 2010 рр.

**Ключові слова:** людський розвиток, глобалізація, індекс економічної свободи, людський капітал, гендерна рівність.