# COMPARATIVE ADVANTAGE OF VARIOUS REGIONS IN THE WORLD ECONOMY

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### **ABSTRACT**

The study would like to make comparism in the international comparative advantages for the developing economic structure concerning the capital, skilled and unskilled human resources of the main economies and country-groups in order to realise the sustainable development. According to Salvatore, Dominic, who emphasized some principles of theory of comparative advantage accompanying his opinions, namely most nations would like to realise free trade for themselves in order to get better profit and price incomes and most of them continue to impose many restrictions on international trade.

The US has the most favourable Revealed Comparative Advantage in the world economy, even against Japan and EU in field of capital and skilled workers. After the US, Japan has more comparative advantage against the EU. From three highly developed regions the EU is the last one. Based on the country – groups, in United States the capital was 0.11, skilled 0.06 and unskilled -0.30. In European Union capital was 0.03, skilled 0.01, unskilled -0.06, in the same time in Japan capital was 0.07, skilled 0.15 and unskilled was -0.50 according to field of Revealed Comparative Advantages.

Also in spite that OPEC countries have somehow little more favourable positions than other developing countries, they have so mush high level of unskilled workers and considerable less skilled workers. In Eastern Europe including Russia, capital was - 0.08, skilled -0.31, unskilled 0.36. In OPEC capital was - 0.09, skilled -0.29, unskilled 0.45. Their position is little similar than the Eastern Europe, including Russia, in filed of Revealed Comparative Advantages.

The data show that the highly developed countries can play role for the future sustainable development and economic growth based on the skilled human resources, which help the innovation development. The innovation development can not be realised without skilled human resources. Also free flow of four elements results in decreasing of expanditures of production, including the labour force, as employee, finally takes possibility to achieve higher level of work efficiency with using skilled workers, advanced technology and R&D – research and development - to ensure competitive position either on the world market or local markets.

Keywords: Revealed Comparative Advantage, Capital, Skilled human resources, EU, OPEC

### INTRODUCTION

The research starts from the main aim of employment issues and its separation among the economic sectors; and the efficiency of human resource in the economic activities of the sectors from point of view of comparative advantages. Also the study would like to make comparism in the international comparative advantages for the developing economic structure concerning the capital, skilled and unskilled human resources of the main economies and country-groups.

The study focuses on the changing economic structure based on the separation of human resouce and other production inputs among the different economic regions.

There some issues accompaning with conditions of capital, skilled and unskilled human resources, which are a sfollows:

- capital capacity to increase investments for creating workplaces, jobs at first for national and local human resources to extent the national internal markets and to increase the import and create the export capacity based on the export orientated economic growth;
- by through of diversified economic development to achive changing the economic structure with human resource structure in order to realize economic growth;
- efficiency energy using in EU and MENA regions for economic development based on comparative advantage.

## **MATERIALS AND METHODS**

According to *Salvatore, Dominic* (SALVATORE, D. 2011), who emphaized some principles of *theory of comparative advantage* accompaning his opinions, namely most nations would like to realise free trade for themselves in order to get better profit and price incomes and most of them continue to impose many respictions on international trade.

He emphasized that the first empirical test of the theory of comparative advantage based on labor productivities and costs was conducted by MACDOUGALL in 1951, using labor productivity and export data for 25 industries in the United States and the United Kingdom for the year 1937. Since wages were twice as high in the United States as in the United Kingdom, MacDougall argued that costs of production would be lower in the United States in those industries where American labour was more than twice as productive as British labour. These would be the industries, in which the United States had a comparative advantage with respect to the United Kingdom and in which it would undersell the United Kingdom in the rest of the world. On the other hand, the United Kingdom would have a comparative advantage and undersell the United States in those industries where the productivity of British labour was more than one-half as productive as American labour. MacDougall's empirical results showed that this was indeed true for 20 out of the 25 industries that he studied (MACDOUGALL, G.D.A., 1951).

Salvatore, Dominic (SALVATORE, D. 2011) pointed out that even *Balassa* analysed the positive relationship between *labour productivity* and *exports* for the United States and the United Kingdom, which was confirmed by subsequent studies by *Balassa* using 1950 data and *Stern* using 1950 and 1959 data. More recently, the Ricardian trade model was confirmed by *Golub* for trade between the United States and Japan using 1990 data for 33 industries and by Golub and *Hsieh* for trade between the United States and nine other countries Japan, Germany, the United Kingdom, France, Italy, Canada, Australia, Mexico, and Korea) using data for 39 sectors from 1972 to 1991. Thus, production costs other than labour costs, demand considerations, political ties, and various obstructions to the flow of international trade did not seem to break the link between relative labour productivity and export shares (GOLUB S. S., 1995; STERN, N., Tubiana, L., 2008; Balassa, B., 1962). Based on data mentioned above I declare that naturally the labour productivity has strong correlation with skilled workers.

Also Salvatore, D. (SALVATORE, D. 2011) over his theorem of comparative advantages, who extend his theory with *Heckscher-Ohlin model* concerning the foreign trade, as he wrote:

"The factor-price equalization theorem of the *Heckscher-Ohlin* (H-O) model postulates that *international trade will bring about equalization in the returns to homogeneous or identical factors across nations*. What this means is that international trade will cause the wages of the same type of labour (Labour with the same level of training, skills, and productivity) to be the

same in all trading nations (in the absence of trade restriction, transportation costs, and other assumptions). Similarly, international trade will cause the return or earnings of homogeneous capital (Le., capital of the same productivity and risk) to be the same in all trading nations. Both relative and absolute factor prices are equalized."

Consequently I can declare from point of view of opinion of Salvatore that comparative and competitive advantages of nations can be realised and implemented by foreign trade.

### RESULTS

Naturally investments can result in developing tehenology and technique without increasing employment level. In spite thet the investment activities can increase the GDP growth; it does not mean that the number of workplace increases in any case. Also there is a difficulty for the research that how these economic correlations between the GDP growth and changing number of workplace can be followed in case of the EU, as an international regional economic integration or in case of the MENA (Middle East and North Africa) region, which this last one can not be so strong regional economic integration, in spite that the Arab countries of the Arab-Gulf region have reached considerable results in their economic cooperation and integration, too.

The other issue can emerge that how the increasing skilled and unskilled employment level are resulted by investments, which can make capital-use be efficient at national economic level or level of country-group in main economic regions of the world economy, either in the EU or MENA region including the most important Arab economies in OAPEC (Organization of Arab Petrol Exporting Countries) or OPEC (Organization of Petrol Exporting Countries), for example Saudi Arabia, Kuwait, State of Qatar or United Arab Emirates (UAE).

Also the other question can emerge that how much capital, skilled and unskilled human resource activities can increase the *comparative advantages* or the competitive advantages or both of them can be increasing?

Comparative advantages are based on the comparing the production cost or expanditures of inputs, and the competitve advantages are based on the using the advanced technology ensuring advantages for producers or exporting countries. Naturally in case of the most of economies in the world economy, the comparative advantages can be resulted by low cost level of the human resource. The problem is that it can not remain for longer time. For the future the best advantage for any economy can be resulted by developing technologies and techniques. Any way the comparative advantages or the competitive advantages can make influences on the increasing skilled, export capacity by efficiently using capital and decreasing unskilled human resources.

The other issue, as question can also emerge that which kind of *changing economic structure* can be resulted by these investment activities, for example either to develop the mining industrial sector or manufacturing sector. During the long economic development it is clear that the increasing manufacturing sector can result highly value added products, which can ensure more export income for exporting countries or can decrease the import volume from the world market in order to make more positive or less negative balance of foreign trade, which can result better favourable balance of payment to decrease the future state dabte. Other wise the increase of investment activities in field of mining sector or basic product sectors can ensure more export income, which does not means that the import can decrease, because the

economy/country should increase import of highly value added products to ensure demands of internal market demands. In this case this can not derease the import volume in any case, but this can only decrease the possible negative balance of payment.

Since the beginning of the XXI century about 94% of the world economy's GDP was produced by the manufacturing industrial economic branches and the remain share of this world economy's GDP, as about 6% produced in mining sector or basic product producing sectors including the agricultural one.

The other question can emerge, that how the capital supply is going on in MENA (Middle East and North Africa) region, which depends on mostly crude oil price income, as export incomes of the Arab petrol exoprting countries? Also the other question coming from the previous one is that how much the absorption capability of the Arab countries to realise investments into their owned economic life, which means that how much the Arab petrol capital can invest into own economies or flow to the other Arab countries of MENA region by through of the Arab petrol capital flow coming from Arab petrol exporting countries to the other Arab non petrol exporting countries?

Because the absorption capability is at low level even in the Arab petrol exporting countries, the Arab capital outflow will strongly flow out of the MENA region into the rest of the world economy, mostly into highly developed countries, where the highly value added products are produced. In this case the Arab capital outflow also operates as a Foreign Direct Investment (FDI) scheme in the highly developed countries. The Arab national capital has role in economic growth in the highly or higher developed countries. In the highly developed economies the service sector has dominant share of the nation GDP, namely more than 50%, and the industry sector has about 30%, and finally the agricultural sector has only maximum 4% of the GDP. In case of OPEC and OAPEC countries the mining industry has almost share of 50-80% from GDP, namely the crude oil mining industry. Recently the manufacturing industry sector has more considerable share from GDP, namely 10-20%, which can not be considerable. In OPEC countries the investment possibility is very low based on the resasons coming from their economic conditions, namely the human power resource supply is at low level on the human resource market, very narrow internal consuming market, the given geographical situations are very unfavourable, the mining fields are very far from the using fields of manufacturing industry and from the internal consuming market, mining fields are often placing very far form the road-transport network of the world economy and world trade, the large destencion increase the cost of transports even within the MENA region.

My opinions can be summarised about the correlations among capital, investments and skilled vesus unskilled human resources, which are as follows:

- 1. Mainly the *investment capacity* of OPEC countries depends on real export price-income coming from crude oil export and its *Purchasing Power Parity (PPP)*. The OPEC countries have the best comparative and competitive advantages in case of crude oil production and export, because they have significant crude oil stock and they can improve the mining and production technology for crude oil industry in MENA region. Naturally these advanced technologies are imported from the highly developed countries, first in the US.
- 2. The *investments* mostly resulted by OPEC capital *can be successful in field of mining industry* in MENA region or in the OAPEC Arab countries.
- 3. The *Arab capital outflow* from the Arab world can be realised most successfully in forms of *transnational corporations* based on the private mangement, but sometimes as state

owned corporations within the scheme of Foreign Direct Investment (FDI). Also the Arab capital outflow is stimulated by less skilled workers or unskilled workers and their less purchasing power resulting narrow domestic markets in Arab countries.

Based on this equilibrium by through of free trade, the EU extents the free trade as free flow of products with free flow of the other three elements, namely labour force, capital and services. Therefore the free trade is focusing on the free flow of results of production, as products complates with free flow of other production inputs (capital, and labour). But over the production process there is a service sector, as the fourth element, which aslo can stimulate to decrease the poduction costs, because service sector plays role as backgroung position for the production process. Sometimes the service sector means as infrastructure network for the production network, or production process.

## **CONCLUSIONS**

The data show that the highly developed countries can play role for the future sustainable development and economic growth based on the skilled human resources, which help the innovation development. The innovation development can not be realised without skilled human resources. Also free flow of four elements results in decreasing of expanditures of production, including the labour force, as employee, finally takes possibility to achieve higher level of work efficiency with using skilled workers, advanced technology and R&D – research and development - to ensure competitive position either on the world market or local markets.

The *Table 1*. shows how highly developed economies got the Revealed Comparative Advantages in fields of capital and skilled, and the developing countries do not have this one.

Table 1. Revealed Comparative Advantage of Various Countries and Regions

Country	Capital	Skilled	Unskilled
United States	0.11	0.06	-0.30
European Union	0.03	0.01	-0.06
Japan	0.07	0.15	-0.50
Canada	0.19	-0.25	-0.03
Rest of OECD'	0.00	-0.01	0.01
Mexico	-0.05	-0.02	0.01
Rest of Latin America	-0.16	-0.23	0.47
China	-0.24	-0.25	0.44
India	-0.04	-0.64	0.37
Hong Kong, South Korea, Taiwan, Singapore	- 0.11	-0.03	0.14
Rest of Asia	- 0.33	-0.05	0.40
Eastern Europe (Including Russia)	- 0.08	-0.31	0.36
OPECb	- 0.09	-0.29	0.45
Rest of the world	- 0.17	-0.18	0.40

aOECD = Organization for Economic Cooperation and Development, which includes all the other industrial countries.

bOPEC = Organization of Petroleum Exporting Countries.

Source: Cline, W. R, Trade and Income Distribution, op. cit., p. 192.

Also the *Table 1*. provides data that the developing countries have dominate position in field of unskilled human resources against the highly developed economies, but this position of developing countries can not succesfull for the future in case of their using highly level advanced technology in order to obtain the competitive advantages. Also I can declare that the US has the most favourable Revealed Comparative Advantage in the world economy, even against Japan and EU in field of capital and skilled workers. After the US, Japan has more comparative advantage against the EU. From three highly developed regions the EU is the last. Also in spite that OPEC countries have somehow little more favourable positions than other developing countries, they have so mush high level of unskilled workers and considerable less skilled workers. Their position is little similar than the Eastern Europe (Including Russia) in filed of Revealed Comparative Advantages.

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