A COMPARATIVE STUDY UPON CHINESE AND TURKISH INWARD FOREIGN DIRECT INVESTMENT

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Abstract
Over the last 30 years, the economic and political power of China has grown globally particularly in Asia. China has become the largest recipient of FDI among the developing countries by adopting East Asian Flying Geese Model. China switched over from Import-substitution strategy to Export promotion strategy. In 2015, China attracted USD of 135 Billion as inward FDI whereas Turkey attracted only USD of 16.5 Billion. We ran the Granger Causality tests between the FDI and Economic Growth for both China and Turkey upon the data from 1980 to 2013. We took the data from World Development Indicator of World Bank. We found that growth in China has been caused by due to inflow of FDI whereas in the case of Turkey the GDP does granger caused the FDI.

Keywords: China, Economic Order, FDI, Turkey

1. Introduction
According to World Investment Report of UNCTAD, China attracted USD of 135 Billion as inward FDI whereas Turkey attracted only USD of 16.5 Billion in the year of 2015 (UNCTAD, 2016). According to Farrell (2008) FDI is a combination of management, entrepreneurship, capital and technology which creates impacts upon domestic market. Classically, FDI adopts two kind of strategies classified as vertical and horizontal. However, United Nations’ Center for Transnational Corporations through its report in 1988 has also considered another type of FDI i.e. complex integration strategies.

Glass and Saggi (2002), and Haile and Assefa (2006), considered horizontal FDI (HFDI), in which the functions of industry operating in domestic and abroad are same, as it offers the same services without exporting much to host country. Furthermore, (Botric and Skuflic, 2006) stated that HFDI reproduces existing production process of home country in international environment. Yeaple (2003) documented that some countries use vertical and some use horizontal strategy while making investment in foreign countries for achieving two motives. Vertical one tries to take benefit of differences in factor price over the countries. However, horizontal tries to avoid the international costs. Whereas, according to United Nations’ Center for Transnational Corporations report published in 1988 complex strategy involves both horizontal and vertical types of FDI investment.

The improvement in productivity level leads towards economic efficiency which in turn affects per capita income which is known as an economic growth. Increased efficiency means increase of output while keeping same amount of input. In case of production, more amount of goods and services are produced while using same labor, capital materials as input. Thus growth is normally measured in real terms by adjusting the inflation in order to avoid its effect on
production. In view of econometrists economic growth is caused due to increase in overall productivity level and is traditionally measured in real gross domestic product (GDP), and measured on the basis of percentage increase.

China is the largest nation upon the globe in terms of population as well as the highest recipient of FDI among the developing nations. The foreign firms have also invested heavily in China from all over the world due to two main reasons. Firstly, the availability of limitless cheap labors, secondly, the access to huge Chinese domestic market. FDI helps in creating more jobs and reducing the unemployment. FDI brings external funding, better production technology and is helping China in climbing up the technological ladder. In 1978, the Chinese Government started to move away from controlled economic system to free market economic system.

Foreign firms started to invest in China from 1979 onwards. This was the time when China started to facilitate foreign investors with the creation of Special Economic Zones (SEZs) in the provinces of Fujian and Guangdong. The main objective of China was to attain the domestic innovated industries with the help of foreign technologies. These Special Economic Zones provided preferential treatment to the foreign firms. SEZs offered huge flexibilities and favorable circumstances for foreign investors, incorporating concessionary charge approaches, exception from export duties and import duties for supplies of instruments, machinery and input materials. The FDI inflows in China and Turkey from 2000 to 2015 are stated below (Table 1).

<table>
<thead>
<tr>
<th>Years</th>
<th>China (USD Billion)</th>
<th>Turkey (USD Billion)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>40.7</td>
<td>0.98</td>
</tr>
<tr>
<td>2001</td>
<td>46.8</td>
<td>3.3</td>
</tr>
<tr>
<td>2002</td>
<td>52.7</td>
<td>1.08</td>
</tr>
<tr>
<td>2003</td>
<td>53.5</td>
<td>1.7</td>
</tr>
<tr>
<td>2004</td>
<td>60.6</td>
<td>2.7</td>
</tr>
<tr>
<td>2005</td>
<td>72.4</td>
<td>10.03</td>
</tr>
<tr>
<td>2006</td>
<td>72.7</td>
<td>20.1</td>
</tr>
<tr>
<td>2007</td>
<td>83.5</td>
<td>22.04</td>
</tr>
<tr>
<td>2008</td>
<td>108.3</td>
<td>19.8</td>
</tr>
<tr>
<td>2009</td>
<td>95.0</td>
<td>8.5</td>
</tr>
<tr>
<td>2010</td>
<td>114.7</td>
<td>9.08</td>
</tr>
<tr>
<td>2011</td>
<td>123.9</td>
<td>16.1</td>
</tr>
<tr>
<td>2012</td>
<td>121.08</td>
<td>13.2</td>
</tr>
<tr>
<td>2013</td>
<td>123.9</td>
<td>12.2</td>
</tr>
<tr>
<td>2014</td>
<td>128.5</td>
<td>12.1</td>
</tr>
<tr>
<td>2015</td>
<td>135.6</td>
<td>16.5</td>
</tr>
</tbody>
</table>

Source: UNCTAD (2016).

Comparatively, Turkey had never been able to attract the good amount of FDI inflows historically. The domestic political instability is attributed as main reason of poor FDI inflows in Turkey along with the bureaucratic hurdles in the way of prospective FDI firms. In the 1960s, the
new firms aiming to enter the Turkey were forced to get about 23 signatures from various governmental officials in order to establish their subsidiaries. This whole lengthy and painstaking process was expanded over the time period of about three years. In simple words the foreign firms were not much welcome and facilitated in Turkey. But the accession negotiations of Turkey with Europe appeared to be as a blessing for Turkey in the context of FDI attraction. The accession negotiations of Turkey and the European Union started in October 2005. These negotiations raised the Turkey’s profile and the potential as FDI destination. The geographical position of Turkey is also of prime importance and a motivating factor for the foreign investors.

The foreign firms consider Turkey as an important base that provides access to several markets such as European Union, Middle East and Central Asian Republics (Erden, 1997). Turkey needs to keep on extending the financial, non-financial and tax incentives to the foreign investors even with more vigor. Financial incentives include government grants, loans and subsidies. The provision of Free Trade Zones, Export Processing Zones, improved land structures, cheap land prices and employment subsidies fall under the category of non-financial incentives. Tax incentives include tax holidays, preferential tax rates and exemption of custom duties upon import of raw material.

The huge differences in terms of FDI inflows between China and Turkey can be easily observed and noted from the above table. For instance, China received USD 135.6 Billion whereas Turkey received only USD of 16.5 Billion in the year of 2015.

2. The East Asian Flying Geese Model

The flying geese model was introduced by Akamatsu (1962). He established the multi-tier hierarchical model in which the importance of economic integration was fully emphasized and highlighted. The model described that North-South economic connections, i.e., the relationship between the advanced and the developing markets would be very beneficial for especially the developing countries. The fruits of development could be transferred from developed countries to developing countries through economic integration.

The Flying Geese Model has the following four stages: Stage 1 is the importation of manufactured consumer goods from developed countries whereas in Stage 2, domestic industry starts the production of formerly imported manufactured consumer goods while importing capital goods to manufacture those consumer goods. In Stage 3, domestic industry starts exporting the manufactured consumer goods and finally in Stage 4, the consumer goods industry catches up with similar industries of developed countries.

Over the passage of time the East Asian countries aggressively developed such connections with the developed countries through trade and investment. But initially Japan adopted the violent interventionist policy to attain the regional hegemony. It is important to mention that Japan made the first effort to lead Asian countries before the Second World War under the policy of the “Greater East Asia Co-Prosperity Sphere” (Li, 2007). Under this policy, Japan militarily invaded and governed the other countries of the region but it failed in attaining the regional domination. So after Second World War, Japan embarked upon the path of economic and industrial revolution with the help of American capital and technologies.

The East Asian Flying Geese Model states that the groups of Nations are flying together in layers. The layers imply the levels of economic development of these flying countries. In this model, Japan is the leading goose with the prospered economic, financial and technological developments. Japan transferred its capital and technological developments to the countries of second tier in order to boost their economies technologically. The countries in the second tier are South Korea, Hong Kong, Singapore and Taiwan. In response these countries helped to develop the countries of third tier. The countries of third tier are Indonesia, Malaysia, Philippines and Thailand.

Presently, China and India are trying to catch up with the West as a part of a regional hierarchy. Chinese economic progress and prosperity is also attributed to the implementation of Flying Geese Model. Over last 36 years, China has attracted a tremendous amount of FDI. It shifted itself from import-substitution strategy to export-promotion policy. The symbol of flying
geese “Λ” in China signifies culturally an “order” based on leadership and cooperation (Kayani, 2013).

3. Historical Evolution of FDI in China and Turkey

In order to attract FDI, China created the Special or Preferential Economic Zones in the provinces of Fujian and Guangdong provinces in 1979. China gave special tax concessions to the foreign firms which established their subsidiaries in these SEZs. Even these firms were charged a profit tax lower than that applied to domestic firms (Blonigen and Ma, 2010). SEZs gave preferential treatment to foreign investors. SEZs offered significant liberties and benefits to the foreign investors. They were given special tax concessions, the exemption from export duties and import duties for equipment, instruments, and apparatus to be used in the production (Chen, 1997).

In 1984, China extended the concept of SEZs to further 14 coastal cities and Hainan Island. Out of these 14 cities, the 12 cities were nominated as Technology Promotion Zones in the year of 1985. To lead the development of area around Yangtze River, the Pudong District of Shanghai was also declared as a new development zone in 1990 (Fung et al. 2002). Initially FDI occurred in China through joint-ventures but in 2001 these restrictions were removed under the WTO commitments. Thus the joint ventures were replaced by the solely run enterprises as most popular version of FDI in China.

Turkey started to liberalize its economy with the introduction of structural reforms in the beginning of 1980s. Turkish Government decided to move towards export promotion policy from the import substitution strategy. But Turkey could not attract even reasonable amount of FDI in 1980s and 1990s because of corruption and the political instabilities. Thus Turkish Government introduced new FDI Law in 2003 to attract more foreign investors. The important aspects of this law facilitate the investors with less bureaucratic delays and hurdles. Furthermore, there are 20 Free Trade Zones in Turkey where the investors are exempted from corporate and income taxes. The firms in the Free Trade Zones receive the preferential treatment from the Turkish Government. The firms of Free Trade Zone are exempted from custom duties if they import goods from other countries for production in those designated Free Trade Zones.

4. Literature Review

Blomstrom et al. (1993) examined the relationship between economic growth and fixed capital for 100 countries during the period of 1965 and 1985 to find causal relationship. The regression and statistical techniques were applied and it was observed that increase in growth leads increase in capital formation rate and vice versa. Furthermore, it was also documented that high capital formation rates caused rapid growth in per capita income. The study by Hossain and Hossain (2012) documented that increase investment in shape of FDI in developing countries needed an analysis of the effects created upon economic growth. The impacts of FDI over domestic economic growth were created due to enhanced facilities of technologies and skills of managers. Therefore, study concluded that impact of FDI over economic growth were enormous.

Almfraji and Almsafir (2014) explained the direct and indirect importance of FDI upon bringing the change in economic growth of any country over the last few decades. In this study, authors studied the impact of FDI upon economic growth over the period of 1994-2012 by reviewing the existing studies. It was documented that FDI and economic growth has significant positive relationship in most of studies, but in some situations negative or no relationship also exists. Borensztein et al. (1998) examined the impact of FDI on economic growth of 69 less developed countries for the period of 1970-89 by applying regression analysis. The study found that FDI has positive impact on economic growth through the involvement of human capital. Furthermore, FDI caused more increase in growth as compared to domestic investment.

De Mello (1999) while considering OECD and non OECD countries for the period of 1970-1990, concluded that long term growth in these countries is calculated on basis of knowledge from investor countries to host country and facilities of technology and the level of
impact is determined by matching the relationship between FDI and economic growth. Furthermore, no impact of FDI over growth was observed in non-OECD sample, whereas FDI has negative impact on GDP for only higher income countries. Li and Liu (2005) in case of study spread over the data of 84 countries conducted with the help of panel data analysis concluded that FDI has both direct and indirect impacts on growth through its collaboration with human capital.

The relationship between FDI and Economic growth in case of China was studied by Zhang (2001) by using cross section, panel data and growth model for the period of 1984-1998. The result concluded that FDI supports economic growth and income growth. In another study by (Ek, 2007) the author analyzed the impact of FDI upon economic growth of China for period of 1994-2003. The study was conducted on basis of secondary data obtained from 30 different regions of China. The study concluded that FDI has positive impact on economic growth with significance level at 6%. Zhang (2006) examined the relationship between FDI and economic growth in China for the period of 1992-2004 by using panel data analysis on basis of growth model. The study concluded positive impact of FDI upon economic growth and found to be stronger in coastal as compared to inlands.

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Turkey started process of bringing economic and financial reforms along with liberalization in 1980 and was completed in 1989. In the study by (Demirsel et al. 2014) the authors analyzed the impact of FDI upon economic growth in Turkey for the period of 2002-2014 with the help of data and by applying various statistical tests. In case of Turkey, it was concluded that FDI mainly consists of mergers and acquisitions and it did not create any impact on GDP of country. It was suggested that economic policies must be developed in a way that can attract new and more FDI.

Ergul et al. (2016) analyzed the association between economic growth and FDI for Turkey during the period of 1989-2014 by applying vector autoregressive framework (VAR). The statistical tests like Johansen Co integration test and Granger causality tests were applied for determining the causal relationship. The study concluded that, no relationship exists between FDI and economic growth; means that no indicator was found to have relationship between both of them. (Kilic and Ates, 2009) conducted the study for sample from Turkey by analyzing the impact of FDI over economic growth. The study documented that direct foreign capital impacts GDP positively. The study also explained that Turkish economy has always welcomed foreign direct investment especially during 1980. Some more studies about the relationship between FDI and Economic Growth are mentioned below (Table 2).

The causality results caused by the Bank. We found data between the FDI and Economic Growth are very rare. So FDI As well as the economists The relationship 5. Methodology Note: Author’s compilation based on the literature

Table 2. Some more previous studies from literature

<table>
<thead>
<tr>
<th>Author</th>
<th>Sample and Methodology</th>
<th>Relationship between FDI and Economic Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Aitken and Harrison, 1999)</td>
<td>The study was examined through panel data analysis and correlation technique for the Venezuela as a sample.</td>
<td>Positive and Negative Relationship</td>
</tr>
<tr>
<td>(Alagoz et al. 2008)</td>
<td>The study was conducted through used granger causality test for sample obtained from Turkey over the period of 1992-2007.</td>
<td>No Relationship</td>
</tr>
<tr>
<td>(Al-Irani and Al-Shamisi, 2007)</td>
<td>A sample from Bahrain, Kuwait, Oman, Saudi Arabia, and United Arab Emirates was considered for period of 1970-2004. A Granger causality test was applied for examining relationship.</td>
<td>Bidirectional Causality</td>
</tr>
<tr>
<td>(Ali and Saray, 2010)</td>
<td>The study was analyzed through panel data analysis for sample of Turkey.</td>
<td>Positive Relationship</td>
</tr>
<tr>
<td>(Carkovic and Levine, 2002)</td>
<td>The study gathered data of various countries from World Bank and IMF as sample and used Panel data analysis.</td>
<td>No influence</td>
</tr>
<tr>
<td>(Karimi and Yusop, 2009)</td>
<td>Examined through ARDL for sample from Malaysia.</td>
<td>No Strong Relationship</td>
</tr>
<tr>
<td>(Mencinger, 2003)</td>
<td>The study was examined through panel data analysis for transition economies.</td>
<td>Negative Relationship</td>
</tr>
<tr>
<td>(Nair-Reichert and Weinhold, 2001)</td>
<td>A study was executed for 24 developing countries during the period of 1971-1995. A Mixed fixed and random coefficient approach was applied for results analysis.</td>
<td>Significant Positive</td>
</tr>
<tr>
<td>(Rand and Tarp, 2002)</td>
<td>The study was examined through standard root test and correlation technique for developing countries.</td>
<td>No Relationship</td>
</tr>
<tr>
<td>(Yilmazer, 2010)</td>
<td>The study was conducted through granger causality test for sample obtained from Turkey over the period of 1991-2007.</td>
<td>No Strong Relationship</td>
</tr>
</tbody>
</table>

Note: Author’s compilation based on the literature

5. Methodology and Results

The relationship study of FDI and Economic Growth is of prime interest and importance among the economists and the researchers. The direction of causality runs from economic growth to FDI As well as from FDI to economic growth. The countries where causality runs from FDI to economic growth are very rare. So in this section we have run the Granger Causality tests between the FDI and Economic Growth for China and Turkey. We took the secondary annual data from 1980 to 2013. The data has been taken from World Development Indicator of World Bank. We found very interesting results. In case of China the economic growth has been caused by the inflow of FDI whereas in the case of Turkey the GDP does granger caused the FDI. Both of the countries have equally two different results under the Granger Causality tests. The causality results for China and Turkey are stated below respectively (Table 3 and 4).

Table 3. Granger causality test for China

<table>
<thead>
<tr>
<th>Null Hypothesis</th>
<th>Obs</th>
<th>F-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>FDI does not Granger Cause Growth</td>
<td>32</td>
<td>0.19629</td>
<td>0.82298</td>
</tr>
<tr>
<td>Growth does not Granger Cause FDI</td>
<td>4.56702</td>
<td>0.01996</td>
<td></td>
</tr>
</tbody>
</table>

Note: Pairwise Granger Causality Tests; Sample: 1980 2012; Lags: 2

It can be seen that growth in China has been caused due to inflow of FDI.

Table 4. Granger causality test for Turkey

<table>
<thead>
<tr>
<th>Null Hypothesis</th>
<th>Obs</th>
<th>F-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP does not Granger Cause FDI</td>
<td>32</td>
<td>3.56232</td>
<td>0.0424</td>
</tr>
<tr>
<td>FDI does not Granger Cause GDP</td>
<td>0.86752</td>
<td>0.4314</td>
<td></td>
</tr>
</tbody>
</table>

Note: Pairwise Granger Causality Tests; Sample: 1980 2013; Lags: 2
It can be seen that GDP does granger caused FDI. FDI increased with the Growth in GDP.

6. Conclusion and Discussion

China has appeared as the center of a regional economic order in Asia. The Asian regional system has developed Sino centric. China has become the largest recipient of FDI among the developing countries by adopting East Asian Flying Geese Model. In 1978, the Chinese Government started to move away from controlled economic system to free market economic system. China switched over from Import-substitution strategy to Export promotion strategy. In 2015, China attracted USD of 135 Billion as inward FDI whereas Turkey attracted only USD of 16.5 Billion. Turkey started to liberalize its economy with the introduction of structural reforms in the beginning of 1980s. Turkish Government also introduced new FDI Law in 2003 for facilitating foreign investors. Resultantly, FDI inflows increased rapidly from 2003-2008.

We ran the Granger Causality tests between the FDI and Economic Growth for both China and Turkey upon the data from 1980 to 2013. We took the data from World Development Indicator of World Bank. We found that growth in China has been caused by due to inflow of FDI whereas in the case of Turkey the GDP does granger caused the FDI. Turkey still needs to do a lot in order to attract and good amount of FDI and to catch up with Chinese level of inward FDI. Turkey can develop into a major economic hub over next 20 years because of its important geographical location. Especially, Istanbul, Izmir and Ankara have huge potential of attracting FDI because of their well-developed infrastructure and educated workforce.

Turkey needs to keep on extending the financial, non-financial and tax incentives to the foreign investors even with more vigor. Financial incentives include government grants, loans and subsidies. The provision of Free Trade Zones, Export Processing Zones, improved land structures, cheap land prices and employment subsidies fall under the category of non-financial incentives. Tax incentives include tax holidays, preferential tax rates and exemption of custom duties upon import of raw material. In general, Turkish infrastructure and human resources are not yet capable of attracting good amount of FDI like China. However, the demographic location of Turkey is very supportive and strategic for attracting good amount of FDI.

References


