Foreign Direct Investment (FDI) in Agriculture Implication into Emerging Country Change and Socio-Economic Development

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Abstract
Foreign direct investment (FDI) has been used as a strategy in emerging countries which made a tremendous change in their economy. However, lack of study have been undertaken to know how these change can have contributed the country poverty alleviation and economy growth. Therefore, looking to fulfil the research gap, this paper aimed to seek how FDI implication in agriculture development through job creation, taxes payment, transfer of knowledge and technology contribute the country poverty alleviation. The Lao People's Democratic Republic was used as a case study and a sample of 450 respondents were collected through a survey questionnaire by self-administrated (face to face with interaction with the participant). The results shown that FDI implication in agriculture development through FDI job creation, FDI taxes payment have a strong impact on poverty alleviation but with weak effect at long-term, however, FDI transfer of knowledge and technology have a weak impact on poverty alleviation though with greater significance at long term. Transfer of knowledge and technology is the significant asset needed for emerging economy from FDI to boost change and contribute to their economy growth.

Keywords: Foreign Direct Investment, Poverty Alleviation, FDI Transfers Of Knowledge And Technology, FDI Job Creation, FDI Taxes Payment.

1. Introduction
Nowadays, FDI has become the main driver of socio-economic development and the transformation of emerging countries. However, the predominantly exceptional expansion of FDI in emerging countries has led, according to OECD countries, to boost foreign direct investment (FDI) in emerging countries, compared to one third of the world stock, against one fifth added in 1990. Therefore, the greater role played by FDI in emerging countries has raised expectations about possible development assistance. FDI allows a significant change by generating high quality jobs and introducing updated production and management practices, facilitated by many governments that develop new policies to liberalized their FDI system and charted best policies to attract investment that promote foreign direct investment.

As acknowledged by previous scholars and researchers, it has been recognized that the take full advantage of FDI for the host country is substantial such as technology spill overs, human capital formation support, enhancement of government revenue through taxes payment, and development of agriculture through new practices.
All these benefits contribute to strengthen economic growth, which is the main instrument to reduce poverty in these economies. However, the economic impact of FDI is difficult to measure accurately. The benefits of FDI do not increase automatically and uniformly among counties, sectors and local communities. These benefits vary from country to country and are difficult to separate and measure. When the inflow of FDI has significant (non-marginal) effects, the measure is even more difficult: there is no precise method to specify the hypotheses that “what would have happened if or several transnational corporations had not made a particular investment”. The evaluation of the effects of FDI on development generally uses one of two approaches. One is the econometric analysis of the relationship between incoming FDI and various measures of economic performance. The second is a qualitative analysis of several aspects of the impacts of transnational corporations, without trying to calculate a specific relationship or rate of return (UNCTAD, 2006). The last approach, which was adopted in the impact discussion of the host country below, includes an examination of the interactions between the unique characteristics of transnational corporations and the unique characteristics of countries (Dunning, 1993).

However, previous literatures suggest that investments that involve local farmers as equal business partners give farmers an active role and leave them in control of their land, have more positive and lasting effects about the local economy and social development. Although the possible benefits of FDI in agriculture have been the subject of much discussion, there is lack of study to show the systematic evidence of the actual effects in the host country. In order to gain a comprehensive understanding of the benefits, this study was conducted to identify trends, drivers and impacts of foreign investment in agriculture on emerging country changes and socio-economic development.

2. Investment in Agriculture and its impact on socio-economic development

Investing in agriculture is the most important and effective strategy to reduce poverty in rural areas, where the majority of the world’s poorest people are concentrated (World Bank 2008, FAO 2012). Investing in agriculture helps reduce poverty and hunger in several ways. Farmers are investing to improve their productivity and increase their income. From a social perspective, this generates a demand for other rural goods and services and creates jobs and income for those who respond to this demand, usually the rural poor without land. These benefits are reflected from the economy of the people to the economy as a whole. Investing in agriculture is also essential to eradicate hunger in all its forms and ensure food and nutrition security. Agricultural investment by farmers or the public sector to increase farm-level productivity can also help improve the availability of food in the market and push down prices. Make food more accessible for rural and urban consumers (Alston et al., 2000). Lower food prices allow consumers to supplement their diet with a wider variety of foods, such as vegetables, fruits, eggs and milk, which improves the use of nutrients in the diet (Bouis, Graham et al. Welch, 2000). Finally, agricultural investments can also reduce the vulnerability of food supply to shocks, thereby improving consumption stability.

However, only public sector investments will not be sufficient. More investment from the private sector is needed, especially the investments of the farmers themselves, which account for most of the investment in agriculture. Lowder, Carisma and Skoet, (2012) concluded their study that farmers are by far the main investors in agriculture. They added that the annual investment in operating capital exceeds government investment by more than 3 to 1 and the gap widens significantly for other sources of investment. Operational investments are more than double that of all other sources of investment combined.

3. Foreign Direct Investment as A Driver of Changes in Emerging Country

In market economies, the private sector is the main driver of growth. It nourishes and stimulates growth when several factors are combined to provide an environment conducive to its expansion. Private investment is a prerequisite for economic growth: it is the driving force behind the machinery of the economy by allowing entrepreneurs to raise the necessary resources to produce goods and services. Rapid and sustainable growth is favoured by a favourable conjunction in which entrepreneurship and investment lead to greater productivity, which in turn allows greater investment in the future. This sequence is also conducive to job creation and the emergence of new technologies, particularly through international trade and investment. The existence of competitive and developed markets is crucial because they promote and reward innovation and diversification, accelerate the entry and exit of companies and help harmonize the rules of the game applicable to all players in the private sector. In addition, markets play a vital role in giving the growth process a broader social and geographical base that opens the door for the poor to participate and benefit. Therefore, the mobilization of private investment is likely to gain importance both for job creation and for the acceleration of growth or the fight against poverty. Increasing the productive capacity of the private sector is not the only factor that counts for socio-economic development, but must
be accompanied by productivity gains resulting from the rationalization and modernization of the means of production.

Despite the new focus on agriculture, many emerging countries face limited financial capacity to fill the investment gap. Commercial bank loans to the agricultural sector account for less than 10 per cent of loans in sub-Saharan Africa, and microfinance loans are generally too weak and inadequate for capital formation in agriculture (Da Silva and Mhlanga, 2009). The solution is also unlikely to come from international donors, as the proportion of official development assistance allocated to agriculture has increased from almost 10 per cent to only 5 per cent (Hallam, 2011).

Emerging country public sector with limited and no alternative resources have resorted to foreign direct investment which helping them to close the investment gap in agriculture. While the available data showing that the agricultural FDI is very low compared to some emerging countries national investment in agriculture some emerging country have took the initiative to develop innovative policies to attract FDI in agriculture. However, the agricultural sector still represents a very small percentage of total FDI flows in most emerging countries. The case studies in sub-Saharan Africa show that less than 5 percent of FDI goes to agriculture (Gerlach and Liu, 2010). Therefore, there is strong growth potential if more investments can be directed to the sector. Although FDI cannot be expected to become the main source of capital, the agricultural sector of the host country can obtain various types of benefits, such as job creation, technology transfer, value add to government revenue, and better access to capital and markets.

In addition, FDI can contribute directly and indirectly to the growth of an economy by improving knowledge, technical skill and indirect technological effects (learning by doing and observing), improving capital stock and improving Fostering production and consumption (Feenstra and Markusen 1994, Blomström and Kokko 2003). Beugelsdijk et al. (2008) distinguishes between horizontal and vertical FDI, concluded that these two types of FDI have different impacts not only on the type of FDI, but also on the level of development of the countries that host FDI. They concluded that horizontal ideas have a much greater effect on economic growth than vertical ideas, but only in developed countries. On the other hand, they did not find a significant relationship between economic growth and the two types of FDI. On the other hand, vertical ideas have a greater impact on the demand for work. Not only can FDI contribute new technologies and knowledge to host countries, but they also contribute to the accumulation of human capital by increasing the demand for skilled labour and, therefore, encouraging people to enrol in the higher education curriculum. In addition, as described in the Millennium Development Goals, education is a key element for human development and economic growth, and the mechanisms that interact with it must be carefully studied.

Human capital is "the knowledge and skills acquired by men through education, training and experience, and that are useful in the production of goods, services and new knowledge" (De la Fuente and Ciccone 2003). The theory of endogenous growth treats the accumulation of human capital as a process of increasing returns to scale, mainly due to the effect of learning by doing between physical and human capital (Lucas 1988). Lucas and Romer’s endogenous growth models suggest that endogenously accumulated human capital has a direct impact on labour productivity. As a result, capital human becomes specific to the individual, leaving innovation in the stock of knowledge as an exogenous factor. It is an important source of long-term growth, either as a direct proxy in research (Romer, 1990, Aghion and Howitt, 1992), or due to its positive externalities (Lucas 1988) Becker et al., 1990). In addition, Lucas (1988) postulates that differences in growth rates between countries they are the result of differences in the rate of accumulation of human capital. According to him, capital does not necessarily go to where it is most scarce, because the returns on investment are greater where the workforce is better trained and infrastructure is more developed. That is why capital, in fact, is moving where its presence is already strong (Mishra et al., 2001). Based on the work of Barro and Lee (1994), Borensztein, De Gregorio and Lee (1998) show that the stock of human capital is essential to determine the magnitude of the effects of FDI on growth. His work focuses on the 1970s and 1980s. They even point out that in countries where the level of human capital is very low, the effects of FDI are negative. Ram and Zhang (2002), who test the impact of FDI on growth for the 1990s, with cross-country data for a large number of countries, find that the impact of FDI on growth is generally significantly positive; on the other hand, they do not find the links highlighted by Borensztein, De Gregorio and Lee (1998) between FDI, human capital and growth.

The possible technological advances contributed by foreign direct investments in agricultural for a given factor or sectors have important implications for the evaluation of the general economic impact. As emerging countries seek to improve their current low levels of productivity and human capital formation, the technological dimension of agricultural investment is of crucial importance for both the production and processing of food and
agricultural products. These investments can introduce imported equipment and improved seeds, or provide direct training or on-the-job training of the workforce. They can also foster innovation in the production, distribution or management of companies, as well as generate splits derived from increased trade in research and development. But again, these innovations and productivity gains are not necessarily guaranteed.

4. Methodology
To analyse the effect of FDI in agriculture, the Lao People’s Democratic Republic was chosen as a model of emerging country research data was collected through a survey questionnaire using the 5-point Likert scale commonly used in the social sciences to allow participants to choose between several options and answer accordingly. This process was completed from February 2019 to June 2019, including: translating the research survey questionnaires from English language into Lao language, meeting with the expert of FDI in Laos for consultation regarding the research, and editing the questionnaires according to the expert recommendation. The place of data collection was suggested by Laos Republic FDI expert including the three provinces such as Vientiane Capital, Xiengkhouang Province and LouangNamtha Province. The choice of the three provinces was not a hazard but based on the important number of FDI in agriculture they are hosting and their prominence contribution in the country change and socio-economic development.

To fulfil the administrative procedure and start the data collection, permission letters were sent to the relevant ministry offices and representative in each province such as the director of department of planning and cooperation, department of rural development and cooperative, department of livestock and fisheries, department of agriculture, the ministry of agriculture and forestry in Laos; and the director of department of foreign investment promotion, the ministry of planning and investment in Laos, and the head of provincial department of agriculture and forestry in Xiengkhouang province and the head of provincial department of agriculture and forestry in Luangnamtha province, in Laos.

However, the convenient sampling method was used to select respondents and the study population was the civil servant working in the institutions cited above and having a task related to FDI or/and agriculture. FDI in agriculture managers and workers. In public sector, questionnaires were sent to each public institution according to the number of staffs working in this area who are deemed to have deep knowledge on the issue rise in this paper. But in FDI and community, Participants were conveniently contacted to ask them to respond to survey questionnaires following the steps as follow: the search for potential respondents, initial communication, questionnaires and follow-up.

Table 1: Summary period of data collection in each Province

<table>
<thead>
<tr>
<th>Province</th>
<th>Period of Time</th>
<th>Number distributed</th>
<th>Number Collected</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vientiane</td>
<td>25 March – 20 April</td>
<td>200</td>
<td>177</td>
</tr>
<tr>
<td>Xiengkhouang</td>
<td>22 April – 16 May</td>
<td>150</td>
<td>141</td>
</tr>
<tr>
<td>LouangNamtha</td>
<td>18 May – 8 June</td>
<td>150</td>
<td>132</td>
</tr>
</tbody>
</table>

Source: data field 2019

5. Operationalization of variables
Foreign direct investment (FDI) in agriculture can make a positive contribution to the host socio-economic development by stimulating the development of agricultural industry, providing technology and management resources that would not otherwise be available. Such a transfer of resources can stimulate the economic growth of the host economy (Hill, 2000 and Selma 2013).

6. Poverty Alleviation
Previous work on the impacts of FDI in emerging countries also focuses on the role they can play in poverty reduction. The articles by Jalilian and Weiss (2002) and Klein, Aaron and Hadjimichael (2001) explicitly raise the issue of the relationship between FDI and poverty reduction. FDI has a positive impact on growth and growth has a positive impact on poverty reduction. FDI is the engine to growth which is good for the poor “(Dollar and Kraay,
2000). This link can be made through the labour market. However, Jalilian and Weiss (2002) focus on some of the problems of poverty measurement: choosing the poverty line, comparing data between countries, etc. In the case of Asia, it seems that rapid growth has been associated with a decrease in poverty thanks to the increase in the level of employment, the development of social infrastructure (education, etc.). However, data at the national level does not capture inequalities between regions within a country. Asian crisis would have had significant negative effects, but still little known, in the countries of the region Klein, Aaron and Hadjimichael (2001) argue that FDI cannot replace the necessary government policies, such as the provision of social services and The provision of public services (water, energy), but for them, FDI remains the greatest effective fight against poverty. Growth reduces poverty, but it can do so to a greater or lesser extent. Kakwani and Pernia (2000) emphasize the redistributive effects of growth. Growth favourable to the poor would be growth accompanied by such effects.

7. Agricultural Industry Development
Several literatures on the role of FDI on growth, especially on macroeconomic impacts in emerging countries however, most of these surveys have sometimes focused more specifically on inequality and, more recently, on poverty reduction. Currently, researchers tend to recognize a positive overall effect of FDI on growth in emerging countries, but with often significant nuances. Jenkins and Thomas (2002) argue that FDI can contribute to economic growth not only by providing foreign capital, but also by increasing additional domestic investment; then the effect of total FDI growth increases. Bosworth and Collins (1999) provide evidence on the effect of capital inflows on domestic investments of 58 developing countries between 1978 and 1995. They distinguish three types of inflows: FDI, portfolio investment and other financial flows (mainly bank loans). They found that about half of every dollar of capital inflows resulted in an increase in domestic investment. According to them, a one-dollar increase in capital inflows is associated with an increase in domestic investment of about 50 cents. (Capital inflows and internal investments are expressed as a percentage of GDP).

8. Tax revenue collected from FDI
FDI can have a positive impact on poverty reduction through the taxation of foreign affiliates, which increases government revenue and, in turn, the state can use it to finance various productive activities, social and development, such as intensive work (industry and Agriculture) or poverty reduction projects.

9. Job Creation
The employment effects associated with FDI are both direct and indirect. In countries where capital is relatively scarce, but where labour is abundant, the creation of employment opportunities, directly or indirectly, has been one of the most important impacts of FDI. The direct effect occurs when a foreign multinational employs several citizens of the host country. At the same time, the indirect effect occurs when jobs are created at local suppliers as a result of the investment and when jobs are created due to the increase in local expenses of EMN employees. To illustrate the effects on employment in the host country, we will use the example of Toyota’s investment in France. According to published information (Hill 2000), this investment has created 2,000 direct jobs and perhaps 2,000 more jobs in the support industries.

The domestic private sector can benefit from building trade relations by providing inputs to these new market players (back links) or by transforming the products of a foreign investor (downstream links). By promoting the exchange of production with domestic industries and other sectors, for example through outsourcing systems between a foreign company and local subcontractors supplying spare parts, components or semi-finished products. Finished at the foreign company, In the end, additional jobs are created. Encouraged economic activity.

The effects of FDI on employment are of considerable interest to beneficiary developing countries: in many of them, the capacity to absorb the human resources released by agriculture in the manufacturing and service sectors is an essential condition for sustainable growth. It has been found that the quantitative effects of FDI on employment in the world are modest, but somewhat larger in host developing countries than in the developed host countries, and particularly in the informal sector. Manufacturing (World Investment Report, 1999). According to Nzomo (1971), a study in Kenya showed that FDI makes only a modest contribution to the creation of total employment, since direct job creation was low, while there was no evidence of its indirect creation of jobs. This may suggest that foreign companies operating in this country do not have production links with local companies. According to Aaron (1999), FDI is probably directly responsible for 26 million jobs in developing countries around the world. In addition, for
each direct work created by FDI, it has been estimated that about 1.6 additional jobs were created indirectly through production linkages between FDI and local sectors.

10. Transfer of Technology and Knowledge
The crucial role played by technical progress in economic growth is now widely accepted (Romer, 1994). Technology can stimulate economic development and industrialization. It can take two forms, which are valuable. Technology can be integrated into a production process (for example, a technology for discovering, extracting and refining oil) or it can be integrated into a product (for example, personal computers) (Hill, 2000). However, many emerging countries lack the resources and research and development skills needed to develop their own technology products and processes. This is especially true in the less developed countries of the world. The evidence shows that the vast majority of economic studies dealing with the relationship between FDI, on the one hand, and productivity and / or economic growth, on the other hand, have shown that the transfer of technology through FDI It has contributed positively to the productivity and economic growth of the recipient countries (OECD, 1991).

Transfer of technologies to emerging countries in relation to foreign direct investment tends to be more modern and environmentally "cleaner" than those available locally. In addition, positive externalities have been observed where local imitation, job rotation and supply chain requirements have led to more general environmental improvements in the host economy.

By transferring knowledge, FDI will increase the existing knowledge stock in the host country through vocational training, skills transfer and the transfer of new management and organizational practices. Management skills acquired abroad through FDI can also have significant benefits for recipient countries. The derived beneficial effect occurs when local personnel trained to occupy managerial, financial and technical positions in the subsidiary of a foreign EMN leave the company and contribute to the creation of local companies. Similar benefits can be achieved if the superior management skills of a foreign EMN encourage local suppliers, distributors and competitors to improve their own management skills. Workers acquire new skills through explicit and implicit training. In particular, training in foreign firms may be of better quality since only the most productive firm trade.

Workers acquire these skills when they re-enter the national labour market. Training courses taken by foreign companies can sometimes be considered under the general title of "organization and administration", which means that the host country will benefit from the "superiority of management" of multinationals. Lall and Streeten (1977) emphasize three types of benefits to management: (1) the efficiency of operations management comes from better training and higher standards, (2) entrepreneurship in the search for investment opportunities, and (3) the externalities derived from training received by employees (such as technicians, managers, accountants, etc.) (Dunning, 1993).

11. Findings and Discussion
To check the impact of FDI in agriculture sector on the country change and socio-economic development, Pearson correlation test to define the existing relation between the chosen factors.

Table 2: Pearson Correlations Results (DV: FDI in poverty alleviation)

<table>
<thead>
<tr>
<th></th>
<th>FDI in Poverty Alleviation</th>
<th>FDI Technology transfer</th>
<th>FDI Employment</th>
<th>FDI taxes payment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coef</td>
<td>Sig 1 tailed</td>
<td>Coef</td>
<td>Sig 1 tailed</td>
<td>Coef</td>
</tr>
<tr>
<td>FDI in Poverty Alleviation</td>
<td>1.000 .990</td>
<td>.435 .000</td>
<td>.604 .000</td>
<td>.621 .000</td>
</tr>
<tr>
<td>FDI Technology transfer</td>
<td>.435 .000</td>
<td>1.000 .990</td>
<td>.560 .000</td>
<td>.398 .000</td>
</tr>
<tr>
<td>FDI Job creation</td>
<td>.604 .000</td>
<td>.560 .000</td>
<td>1.000 .990</td>
<td>.569 .000</td>
</tr>
<tr>
<td>FDI taxes payment</td>
<td>.621 .000</td>
<td>.398 .000</td>
<td>.569 .000</td>
<td>1.000 .990</td>
</tr>
</tbody>
</table>

N = 398
IV: FDI technology transfer, FDI employment, and FDI taxes payment
Source: data field 2019

According to the results shown in table 2, The Pearson correlation coefficients for each path, that is, the links between each of the variables, is statistically significant. However, while the Pearson correlation coefficient between FDI in poverty Alleviation and FDI in Job creation with coef = .604 > .5, and Pearson correlation
The coefficient between poverty alleviation and FDI in taxes payment with coef = .621 > .5 are strong enough but, the Pearson correlation coefficient between FDI in Poverty Alleviation and FDI Technology transfer and knowledge with coef = .435 < .5 is weak.

Table 3: Pearson Correction Results (DV: FDI in Agriculture)

<table>
<thead>
<tr>
<th></th>
<th>FDI in Agriculture</th>
<th>FDI Technology transfer</th>
<th>FDI Employment</th>
<th>FDI taxes payment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coef</td>
<td>Sig 1 tail</td>
<td>Coef</td>
<td>Sig 1 tail</td>
<td>Coef</td>
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<tr>
<td>FDI in Agriculture</td>
<td>1.000</td>
<td>.</td>
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<td>.</td>
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<tr>
<td>FDI Technology transfer</td>
<td>.473</td>
<td>.000</td>
<td>1.000</td>
<td>.</td>
</tr>
<tr>
<td>FDI Job creation</td>
<td>.606</td>
<td>.000</td>
<td>.567</td>
<td>1.000</td>
</tr>
<tr>
<td>FDI taxes payment</td>
<td>.513</td>
<td>.000</td>
<td>.400</td>
<td>.555</td>
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</tbody>
</table>

N = 398

IV: FDI technology transfer, FDI employment, and FDI taxes payment
Source: data field 2019

Likewise, as the correlation results with poverty alleviation as DV, all the variables are statistically significant, but the variable FDI Technology transfer remain having a weak influence with on FDI in agriculture coef = .473 < .5 compared to the coef between FDI in agriculture and FDI Job creation (coef = .606 > .5) and FDI in agriculture and FDI taxes payment (coef = .513 > .5) which have a strong influence on FDI in agriculture, the DV.

Table 4: Total, Direct, and Indirect effect

<table>
<thead>
<tr>
<th>Total effect of X on Y</th>
<th>Effect</th>
<th>se</th>
<th>t</th>
<th>LLCI</th>
<th>ULCI</th>
<th>c_ps</th>
<th>c_cs</th>
</tr>
</thead>
<tbody>
<tr>
<td>M1= FDI job creation</td>
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<td>Direct effect of X on Y</td>
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<tr>
<td>Effect</td>
<td>BootSE</td>
<td>BootLLCI</td>
<td>BootULCI</td>
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<tr>
<td>.80</td>
<td>.04</td>
<td>.1980</td>
<td>.00 .72 .88 .41 .71</td>
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<td>Indirect effect of X on Y</td>
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<td>M1= FDI job creation</td>
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<td>.54</td>
<td>.05</td>
<td>10.51</td>
<td>.00 .44 .64 .27 .47</td>
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<td>Direct effect of X on Y</td>
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<tr>
<td>M2= FDI Taxes Payment</td>
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</tr>
<tr>
<td>Effect</td>
<td>BootSE</td>
<td>BootLLCI</td>
<td>BootULCI</td>
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<tr>
<td>.60</td>
<td>.05</td>
<td>12.53</td>
<td>.00 .50 .69 .30 .52</td>
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<tr>
<td>Indirect effect of X on Y</td>
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<tr>
<td>M2= FDI Taxes Payment</td>
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<tr>
<td>.18</td>
<td>.03</td>
<td>.12</td>
<td>.25</td>
<td></td>
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</tbody>
</table>

Y: FDI Poverty Alleviation, X: FDI Agriculture Development, M1: FDI job creation, and M2= FDI Taxes Payment
Source: data field 2019

As the results shown in table 2 & 3 confirmed that the two variables (FDI job creation and FDI Taxes Payment) are statically significant and have a strong influence on FDI agriculture development and FDI poverty alleviation, a process analysis were carried out to check the direct and indirect effect of the two variables of FDI job creation (M1) and FDI Taxes Payment (M2) used as intervening factors of FDI agriculture development (ID) on FDI poverty alleviation (DV).

The process analysis results shown in table 4 that the total effect of X on Y = 0.80 with standard error estimates (se) = 0.40, t = 19.80, and P = 0.00 < 0.05, the total effect is statically significant. Although, the direct effect X on Y through M1 = 0.54 with standard error estimates = 0.05, t = 10.51, and P = 0.00 < 0.05. And the direct effect X on Y through M2 = 0.60 with standard error estimates = 0.05, t = 12.53, and P = 0.00 < 0.05. Consequently, the direct effects of X on Y through both mediating variables (M1 & M2) are also significant. Hence, the indirect
effect of X on Y through $M_1 = 0.26$ with the bootstrap “nonparametric resampling” standard error estimates = 0.05, and the indirect effect of X on Y through $M_2 = 0.18$ with the bootstrap “nonparametric resampling” standard error estimates = 0.03, confirmed that the indirect effect of X on Y through $M_1$ & $M_2$ are significant, (Biesanz, Falk, & Savalei, 2010; Fritz, Taylor, & MacKinnon, 2012).

For instance, following the mediation analysis steps of Baron and Kenny (1986) to the finding shown in table 4 that, there are a significant relationship from step 1 to step 3. However, in step 4, X remain significant when both mediating variables $M_1$ & $M_2$ are controlled. Hence, the finding supports a partial mediation, (MacKinnon, Fairchild, & Fritz, 2007).

Table 5: Models (Model 1 & Model 2) Significance

<table>
<thead>
<tr>
<th>Model</th>
<th>Regression</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td>777.018</td>
<td>1</td>
<td>777.018</td>
<td>391.845</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>785.256</td>
<td>396</td>
<td>1.983</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>1562.274</td>
<td>397</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>813.452</td>
<td>2</td>
<td>406.726</td>
<td>214.546</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>748.822</td>
<td>395</td>
<td>1.896</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>1562.274</td>
<td>397</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: FDI in Poverty Alleviation
b. Predictors: (Constant), FDI in Agriculture and Poverty Alleviation
c. Predictors: (Constant), FDI in Agriculture, FDI in Transfer of Technology

to test the impact of “FDI in transfer of technology” which was initially the statically significant but with weak influence on FDI in Agriculture and FDI in poverty alleviation shown in table 2 & 3, Anova statistic test was applied using the Variable “FDI in transfer of technology” as moderating variable between FDI in agriculture (DV) and FID in poverty alleviation (IV). The results in table 5 shown that the model 1 without the moderator term is statically significant, F (1. 396) = 391.845, p = 0.00 < 0.05 and the model 2 with the moderator term is statically significant as well, F (2.395) = 214.546, p = 0.00 < 0.05.

Table 6: Models (Model 1 & Model 2) Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>R Square Change</th>
<th>F</th>
<th>Sig. F Change</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.705$^a$</td>
<td>.497</td>
<td>.496</td>
<td>1.40818</td>
<td>.497</td>
<td>391.845</td>
<td>.000</td>
</tr>
<tr>
<td>2</td>
<td>.722$^b$</td>
<td>.521</td>
<td>.518</td>
<td>1.37686</td>
<td>.023</td>
<td>19.219</td>
<td>.000</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), FDI in Agriculture
b. Predictors: (Constant), FDI in Agriculture, FDI in Transfer of Technology
c. Dependent Variable: FDI in Poverty Alleviation

The regression analysis was carried out to know if the model 2 account for significantly more variance than model 1. The results in table 6 shown that model 2 with the moderator between FDI in agriculture and FDI in poverty alleviation accounted for significantly more variance than just FDI in agriculture and FDI in poverty alleviation by themselves, R2 change = .023, p = .00, indicating that there is potentially significant moderation between FDI in agriculture and FDI transfer of technology on FDI in poverty alleviation.

12. Conclusion and Recommendation
Emerging countries governments are increasingly seeking best practices in foreign direct investment (FDI). However, the renewed confidence in the benefits of FDI has led many of them to limit FDI between the 1960s to 1970s and to be more open in the 1990s, (Safarian, 1999). Governments liberalize FDI regimes because they associate FDI with positive effects on economic development and poverty reduction in their countries (eg, Lall, 2000a and Borensztein et al., 1998). These previous finding have had been insightful and reference material in many
emerging countries policies makers, However, there still lacking of research aiming to seek how the development of FDI in specific area can impact emerging country economy grow and boost the change.

This paper grounded on empirical investigation and the first part showed that the factors such as FDI job creation and FDI taxes payment are seemly have a strong impact on poverty alleviation in emerging countries (cf Pearson correlation table 2 & 3), though, they still have a partial effect on poverty alleviation when they were used as interacting term between DFI in agriculture development and FDI in poverty alleviation, (cf indirect effect table 4), (Biesanz, Falk, & Savalei, 2010; Fritz, Taylor, & MacKinnon, 2012). Consequently, the study concluded that FDI job creation and FDI taxes payment have a short term impact on poverty alleviation.

The second part of the finding showed that the factor FDI transfer of technology seemly having a weak influence on poverty alleviation, (cf Pearson correction table 2 & 3), conversely, used as interacting term between agriculture development and poverty alleviation shown that it accounts for significantly more variance which motivated the study concluded that even though FDI transfer of technology have a weak influence on poverty alleviation at short term, its effect is strong and much better in long term which is good for emerging economies. Emerging countries government, looking to attract FDI in agriculture as a strategy to boost change and poverty alleviation should design appropriate policies that taking into account their long-term development strategy including:

- Develop a national capacity (R & D, education, etc.) and infrastructure to establish economic fundamentals that are considered relatively important. This is crucial to take advantage of FDI, for example to raise the level of local suppliers. There is evidence that in many emerging countries, local capacity is being left behind, reducing FDI inflows and decreasing absorptive capacity to offset indirect effects.
- Determine whether FDI fits in with the country's long term development strategy and focus on the type of FDI.
- Target specific FDI that fit the country long term development strategy. This should be coordinated by an investment promotion agency that can act as a one-stop-shop, i.e., to be able to promote, negotiate, facilitate, and perhaps advocate.
- The strategy should be flexible enough to change the direction of the FDI to update it for other higher value-added activities.
- Stimulate the training of local employees working in of foreign companies.
- Encourage the implementation and the use of new technology by foreign companies.

References


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