The factors impacted to local contractor from Foreign Direct Investment in advancing economic hub development in Iskandar Malaysia

Muhamad Syafiq Salim¹, Rozana Zakaria², Eeydah Aminuddin³, Abdul Rahim Abdul Hamid⁴, Redzuan Abdullah⁵ and Jam Shahzaib Khan⁶

¹,⁶ Postgraduate Student, Faculty of Civil Engineering, Universiti Teknologi Malaysia
²,⁵ Associate Professor, Faculty of Civil Engineering, Universiti Teknologi Malaysia
³,⁴ Senior Lecturer, Faculty of Civil Engineering, Universiti Teknologi Malaysia

Corresponding email: rozana@utm.my

Abstract. Iskandar Malaysia is an advanced economic hub which is rapidly growing in the State of Johor. It has been an attractive place for Foreign Direct Investment (FDI) to invest. Many sectors are affected by the presence of FDI including the construction sector. This paper highlights the investigation on the effects of FDI to the local contractor in the Iskandar Malaysia Development. In this study, a questionnaire survey was carried out to gain the information on problems from internal factors and external factors that caused the limitation on involvement in FDI project by local contractors. 73 numbers of local contractor registered under CIDB in class G5, G6 and G7 are the respondents. Frequency analysis and Average Index Analysis are used for the results. This study provides the factors that impacted local construction players in Iskandar Malaysia Development. This study has portrayed that FDI plays a vital and significant role in spearheading the active involvement of local contractors in an urban sustainable development.

1. Introduction
Foreign Direct Investment (FDI) brought three major impacts on factors of productivity, employment creation and upgrading technological and managerial capabilities. Besides, FDI brings ‘tsunami money’ to the intention of economic development of a nation. FDI is essential at certain situations where the government sees it as a necessity for the development to be carried out. The arrival of FDI will encourage inflow of advanced production technology and input brought about by foreign-owned firms or through imports. These measures might be more effective to improve the efficiency and competitiveness at national economy [1]. One of the main impacts of FDI on local suppliers is the increase in productivity as a result of certain benefits of the relationship [2]. In addition to the presence of FDI, it will have more impact on local companies. This will increase the productivity, improve knowledge of management and local companies thus at the same time increase efficiency when dealing with foreign developers [1]. The deal later on resulted in many businesses and projects established in short and long run. For example, about 702,000 jobs have been created in various economic sectors, including the services sectors such as construction and property since the inception of Iskandar Malaysia [3]. [4] stated that foreign investment brings the technology that the local companies can learn and adapt. These measures might be more effective to improve the efficiency and competitiveness at national economy [1].

2. Iskandar Malaysia Economic Development Hub
On 30 July 2006, the 5th Prime Minister of Malaysia announced that Johor Bahru, Malaysia and its metropolitan region i.e The South-Johor Economic Region (SJER) was chosen to be the second economic corridor for the country after the Multimedia Super Corridor (MSC Malaysia) which was developed in Kuala Lumpur. A comprehensive development plan was put in place, together with a new-established regional development authority directly reporting to the cabinet of the Malaysian
Prime Minister. SJER was later renamed as “Iskandar Malaysia” honoring the name of the late Sultan of Johor [5]. Johor Chief Minister has committed to make Johor State to become more significant in delivering various socio-economic initiatives in Iskandar Malaysia. The Iskandar Malaysia development reflects Johor state’s mission and commitment in providing inclusive and sustainable development for the citizen in various fields including social and economic aspects [6].

The investment in Iskandar Malaysia at first was estimated about RM 47 billion where their judgment is necessary to support the initial roll-out of the Iskandar master plan between 2006 and 2010, and a total of RM 4.3 billion was allocated by the Ninth Malaysia Plan in order to build the necessary infrastructures [6]. To complete the project by 2025, the plan requires another RM 335 billion from public and private investments. Private investments will be facilitated by UEM Land i.e the master developer of Nusajaya, other Government Linked Companies, and FDI. At end of 2016, a total cumulative committed investment of 40% (RM 86.71 billion) came from FDI. The top five countries with highest investments into Iskandar Malaysia from January to September 2016 are China, Singapore, USA, Japan and Spain [6]. The creation of IRDA plays a significant role in promoting and stimulating the Iskandar Malaysia Development as a trade, investment and logistics centre, duty free area and a tourist destination among FDI [7]. In opening year 2016, China remains the biggest investor in this rapid developing region economy. Iskandar Malaysia has investments amounted RM 22.2 billion so far by China. This investments from FDI provides employment opportunities to the local people and simultaneously produce high-skilled workers in various fields. Development that has been drafted indirectly will give opportunities to the birth of the country's human resources. The development will be completed in 2025 and that will put Iskandar Malaysia as one of the world-class sustainable city and make Johor as the country's economic hub.

3. The Research Problem Overview

Iskandar Region Development Authority (IRDA) is the regular authority mandated to plan, promote and facilitate development in Iskandar Malaysia. It is estimated that by 2025, the population in Iskandar Malaysia Development will increase to three million, and with this figure IRDA estimated at least 1.2 million housing units need to be built in this developing region [8]. By 2025, the population in Iskandar Malaysia will reach to three million, including 1.4 million in the workforce. Based on this assumption, the development of Iskandar Malaysia needs about 1.2 million housing units, including strata and landed properties. Today, the housing stock in Iskandar Malaysia is slightly less than 700,000, which is short of 500,000 units for the next 10 years [8]. This demand creates lots of opportunities to construction players for both local and foreign investors. The current foreign developers in Iskandar Malaysia are CapitaLand, China Country Garden and Walker Corp [9]. The Chairman of Tourism, Trade and Tourism Minister of Johor stated that about 11% of the RM 203 billion total investments in the region is contributed from the construction sector [10]. The development investment that has been announced given impacts to many sectors on Iskandar, especially when it comes to construction. With a large amount of investment, it provides job opportunities for local contractors. IRDA has awarded a total of RM 1.52 billion or 76% of the contract value of infrastructure projects in Iskandar Malaysia to Bumiputera contractors since 2006 [11].

In contrast, [12] claimed that multiple cases in developing countries shows that the admission of FDI does not give a lot of benefits to the local companies including construction players. The lack of spillovers to local firms was attributed to a number of factors, including limited hiring of local employees in higher level positions, very little labor mobility between domestic firms and foreign subsidiaries. Furthermore, Yang Dipertua Persatuan Kontraktor Melayu Malaysia Negeri Johor (PKMMNJ) stated that due to the development is now be developed by foreign developers, it caused problems to local contractors due to limited tender from government projects. This issue needs to be solved so that the local contractors can get construction projects. This problem should be considered and tackle by the local authorities [12].
The bigger demand on property development creates needs for FDI to involve in Iskandar Malaysia Development. Concurrently, FDI offers an important role to develop the creation of Iskandar Malaysia. Indeed, the arrival of foreign developers provide a wide impact to local construction industry players. Will the adaption of FDI give impacts on economic demographic in Iskandar Region, especially to local contractors who are the construction industry players? Since the data released by the IRDA is limited, whereby IRDA is still developing and collecting its historical data on the impacts of FDI to the development of Iskandar Malaysia economic hub. This study leads to the investigation of problems from internal and external factors faced by local contractors impacted from market demand of FDI in construction projects that spearheaded by foreign investors through FDI.

4. Literature Review
The presence of FDI to the Iskandar Malaysia will give impacts by increasing the existing investment and this situation will provide lots of opportunities for local players and one of the major impacts is construction. The presence of FDI in Iskandar Malaysia Development created competition between local contractors and foreign contractors. Many case studies show that in order to modernize, the local construction industries and clients in global construction markets, particularly in developing countries require project financing. Also a high level of technology and a foreign firm’s advanced experience with knowledge and management skills are required [13]. Compared with foreign developers, local construction companies may have limited absorptive capacity to recognize and adapt the new technology or management skills from the multinationals [4]. This is one of the factors that reduce local contractors’ competition to involve in FDI projects. In case of Iskandar Malaysia Development, many researchers found out that at developing countries, FDI ownership may influence the effects and tendency of local companies’ sourcing [1]. That means FDI also can take action to prevent distribution of knowledge to local companies by ways of paying higher wages to foreign companies to prevent local companies from bidding.

In addition, local companies have limited capacity to adapt and recognize new technology and art of management skills from big multinationals foreign companies [4]. For internal factors, [14] stated that the major causes of construction company failures are: (1) Delay in collecting payments from clients (donors); (2) Closure; (3) Depending on banks and paying high profits; (4) Lack of capitals; (5) Cash flow management; (6) Lack of experience in the line of work; (7) Absence of construction regulations; (8) Low margins of profit due to competition; (9) Awarding contracts to the lowest price; and (10) Lack of experience in contracts. Throughout a project management life cycle, cost is the most considerable and prime factor of success. However, it is common to see often the project is finished with over budget [15]. This happens due to contractor’s lack of experience; cost of material, fluctuation in the prices of materials, frequent design changes, economic instability, and high interest rates charged by banks on loan. This also triggered by mode of financing, bonds payments as well as fraudulent practices and kickbacks as a factor that causing cost overrun [16]. From the other view, [17] found out that the connection between poor site management system, financial problems, and design changes is the most significant reason that causes cost overrun. Things that have been discovered that because poor inspection program, lack of safety policy and education programmes, and unsafe working condition is caused by poor management system that impacts on cost overrun [17]. Similarly, [18] mentioned that one of problems faced by local contractors is unethical behaviour by the person involved in construction industry that gives the impact on quality of the project. The increase of unethical behaviour cause consequential decline in quality of project performance as shown by statistics from construction sites [19].

4.1. Strategy to Enhance Local Contractor Competitiveness
The construction companies nowadays are very dynamic, forcing the contractors to use right strategic decisions in doing the business [20]. Furthermore, their existence is depending on the contractor’s capability to grab opportunities [21]. Local contractors’ companies need to create mechanisms to increase their involvement in FDI projects. The mechanism is set in such a way that the local
construction companies have to expose themselves to foreign developers’ activities. At the same time, it can be observed that these firms’ technologies imitate their way to operations and management practices that increase local construction productivity [22]. Contractors must create domestic linkages. This is because when companies create linkages, knowledge from these firms can be transmitted to the suppliers and distributors, and ultimately to domestic firms using the same suppliers and distributors [23]. In other perspective, the increase in competition that accompanies FDI entry can force domestic firms to increase their productivity by updating manufacturing technologies and adapting advanced management practices to meet these competitive challenges [24]. This is one of the strategies that can be adapted to increase the involvement of local companies in the development of the Iskandar Malaysia. The project participants realized that sharing of knowledge and information is one of the key elements of a successful contractual relationship. There appears to be no clear guide on the process of collaboration between the main contractor and subcontractor, therefore it makes it difficult to effectively interact and achieve a common project goals within the bounds of cost, quality and time [24]. [25] discussed collaborative relations from the angle of strategic alliances and noted that due to the ever-increasing pace of technological developments and access to new technologies, alliances have become a key success factor. Various things can be considered as a key factor for local contractor to involve in FDI projects.

5. Methodology
This research constitutes evaluation and analyses on the data collected though quantitative approaches by method of questionnaire survey delivered to the respondents which are constitutes of contractor Grade G5 to G7. The was questionnaires conducted to gain answer of the followings objectives (i) to identify the impacts of FDI to construction industry in Iskandar Malaysia and (ii) to investigate problem faced by local contractor from market demand of FDI. The results were analyzed using Frequency Analysis and Average Index.

5.1 Frequency Analysis
Frequency analysis is one of methods that is used to analyze data. This method of analysis is used for part A of questionnaire. Below is the formula for Frequency Analysis:

\[
\text{Percentage (\%)} = \left( \frac{n}{N} \right) \times 100\%
\]

Where:
\( n \) = Number of respondent
\( N \) = Total numbers of respondents received

5.2 Average Index
Average Index (AI) is used to analyse the data collected from respondent. [26] stated that the formula for Average Index as follows:

\[
\text{Average Index (AI)} = \frac{\sum (\mu \times n)}{N}
\]

\( \mu \) = Weighting given to each factor by respondents (1 to 5);
\( n \) = Frequency of the respondents;
\( N \) = Total number of respondents.

Whereby the weighting would be:
\( \mu_1 = 1 \), frequency of “Definitely Disagree” response
\( \mu_2 = 2 \), frequency of “Mostly Disagree” response
\( \mu_3 = 3 \), frequency of “Moderate” response
μ4 = 4, frequency of “Mostly Agree” response
μ5 = 5, frequency of “Definitely Agree” response

[27] stated that the classification of the rating scale is like following:

1) Definitely Disagree : 1.00 ≤ Average Index < 1.50
2) Mostly Disagree : 1.50 ≤ Average Index < 2.50
3) Moderate : 2.50 ≤ Average Index < 3.50
4) Mostly Agree : 3.50 ≤ Average Index < 4.50
5) Definitely Agree : 4.50 ≤ Average Index ≤ 5.00

There are 73 respondents representing local contractors that live and work within area of Iskandar Malaysia Development. Majority of them are in executive positions that have responsibility in managing their companies. About 60.3% of respondents are between age 20 to 29 and this represent the highest percentage of respondent and the lowest is 50-59 years old represent 1.4% of respondents. Based on the collected data, 69.9% of respondents represent the male and the rest are women. Majority of them have experience between 1 to 5 years that represent about 57.5% and the lowest percentage is respondents under categories 11 to 15 years and 20 and above which represent 4.1% each. Based on the demographic, study has found out that 64.4% of respondents are from grade G7 Construction Companies while for the G6 and G5 are 5.5% and 30.1% respectively. 70% respondents have experience working under foreign developers and others 30% has no work experience under foreign developers. Table 1 below shows the position of the respondents.

| Position             | Freq. (N) | (%)  | Cum. (%) | Position          | Freq. (N) | (%)  | Cum. (%) |
|----------------------|-----------|------|----------|-------------------|-----------|------|----------|
| General Manager      | 4         | 5.5  | 5.5      | Quantity Surveyor| 3         | 4.1  | 89.0     |
| Project Manager      | 8         | 11.0 | 16.4     | Director          | 2         | 2.7  | 91.8     |
| Site Manager         | 10        | 13.7 | 30.1     | Resident Engineer | 1         | 1.4  | 93.2     |
| QA/QC Engineer       | 3         | 4.1  | 34.2     | Project Admin     | 2         | 2.7  | 95.9     |
| M&E Engineer         | 3         | 4.1  | 38.4     | Safety Officer    | 1         | 1.4  | 97.3     |
| Civil Engineer       | 11        | 15.1 | 53.4     | Development Officer| 1         | 1.4  | 98.6     |
| Project Engineer     | 4         | 5.5  | 58.9     | Contract Admin    | 1         | 1.4  | 100      |
| Supervisor           | 13        | 17.8 | 76.7     | TOTAL             | 73        | 100  |          |
| Site Engineer        | 6         | 8.2  | 84.9     |                   |           |      |          |

6. Results and Discussion
Table 2 shows the finding of respondents on the impacts of FDI to construction industry at Iskandar Malaysia and all the components resulted in more than 3.50 of the average index and all are categorized under the criteria of “mostly agree”. The top impact on construction industry due to FDI is to create high competition among local contractors which is found as 4.07 followed by the increase in number of construction projects due to property demand invest by FDI that has a 3.93 average indexes. The lowest impact of FDI to construction industry at Iskandar Malaysia Development is to create opportunities to local contractors’ involvement with an average index of 3.59 followed by an average index of 3.64 that is represented by more efficient working time management.
6.1 Impacts of Foreign Direct Investment

Table 2. Ranking for FDI Impacts

| Ranking | The Impacts of Foreign Direct Investment                              | Description   | Average Index |
|---------|------------------------------------------------------------------------|---------------|---------------|
| 1       | Create high competition among local contractors                       | Mostly Agree  | 4.07          |
| 2       | Increase number of construction project due to property demand invest by FDI | Mostly Agree  | 3.93          |
| 3       | Create job opportunities to local people                              | Mostly Agree  | 3.88          |
| 4       | Transfer the knowledge of way of work                                 | Mostly Agree  | 3.85          |
| 5       | Create international network between local and international companies | Mostly Agree  | 3.85          |
| 6       | Improve knowledge of management                                       | Mostly Agree  | 3.84          |
| 7       | Local professionals can involve in construction development            | Mostly Agree  | 3.81          |
| 8       | FDI bring technologies to local companies                             | Mostly Agree  | 3.75          |
| 9       | Local construction suppliers can increases productivity               | Mostly Agree  | 3.74          |
| 10      | Systematic system flow of work                                        | Mostly Agree  | 3.71          |
| 11      | Developer companies bring skilled workers to local industries          | Mostly Agree  | 3.68          |
| 12      | Local companies can learn good work ethics from foreign company       | Mostly Agree  | 3.68          |
| 13      | More efficient working time management                                | Mostly Agree  | 3.64          |
| 14      | Create opportunities to local contractors’ involvement               | Mostly Agree  | 3.59          |

In addition, Table 3 and Table 4 portrays the problems faced by Iskandar Malaysia local contractor by looking into the internal factors and external factors.

6.2 Problems Faced By Iskandar Malaysia Local Contractors

From Table 3, it can be seen that financial criteria scored the highest average index with a value of 3.54, followed by government criteria with an average index of 3.47, the human capital and policy criteria with average index value of 3.19 and 2.73 respectively. The fact that respondents are highly agreed that financial is the primary problem for internal factor faced by local contractors in Iskandar Malaysia Development.

For external factors shown in Table 4, government supervision is the criteria that has highest score with an average index of 4.07, followed by human capital with an average index of 3.90, the financial and culture criteria with an average index value 3.89 and 3.40 respectively. From the results, respondents often agree that subject related to government supervision criteria is the external problem faced by local contractors to participate in Iskandar Malaysia Development.
I. Internal Factors

Table 3. Problems from Internal Factors by Criteria

| Criteria                  | Problems (Internal Factors)                  | AI  | Description    | Criteria AI |
|---------------------------|----------------------------------------------|-----|----------------|-------------|
| Financial                 | Financial difficulties of owner              | 3.64| Mostly Agree   | 3.54        |
|                           | Local contractor lack of financial resources | 3.49|                |             |
|                           | Lack in capitals they need the support of    | 3.48|                |             |
|                           | foreign capitals                            |     |                |             |
| Government Supervision    | The government does not regulate the influx  | 3.47| Moderate       | 3.47        |
|                           | of foreign contractors in Iskandar Malaysia  |     |                |             |
| Human Capital             | Local contractors lack of experience involve  | 3.23| Moderate       | 3.19        |
|                           | FDI projects                                 |     |                |             |
|                           | Do not have technical capacity               | 3.14|                |             |
|                           | Poor safety policies and lack of safety      | 2.88|                |             |
|                           | education programmes                         |     |                |             |
| Management Policy         | Local contractors have bad past              | 2.66| Moderate       | 2.73        |
|                           | performance on quality workmanship           |     |                |             |
|                           | Local contractors lack in managing &         | 2.64|                |             |
|                           | coordinating the project site                |     |                |             |

II. External Factors

Table 4. Problems from External factors

| Criteria                  | Problems (External Factors)                  | AI  | Description     | Criteria AI |
|---------------------------|----------------------------------------------|-----|-----------------|-------------|
| Government Supervision    | Local contractors have to compete with foreign contractors | 4.12|                |             |
|                           | Foreign companies come in with their own     | 4.05| Mostly Agree    | 4.07        |
|                           | labour                                       |     |                 |             |
|                           | Foreign companies prefer contractors         | 4.04| Agree           |             |
|                           | originating from their own country           |     |                 |             |
| Human Capital             | Language problem as one of the largest issues| 4.22| Mostly Agree    |             |
|                           | dealt with foreign companies                 |     |                 |             |
|                           | Foreign companies can afford to carry out    | 3.93| Agree           | 3.9         |
|                           | such expense of high skills of worker        |     |                 |             |
|                           | Foreign companies have technical capacity    | 3.55|                |             |
|                           | and needed no support team from local        |     |                |             |
|                           | expertise                                    |     |                |             |
| Financial                 | Have strong financial resource by foreign    | 3.89| Mostly Agree    | 3.89        |
|                           | companies cause foreign developers to have   |     |                 |             |
|                           | power of choosing their own sub-contractor   |     |                |             |
Culture
Foreign companies have perception that local companies are not suitable to be sub-contractors 3.40 Moderate 3.4

7. Conclusion
From the results and discussion, there are several conclusions that can be made. The higher impact of FDI to construction industry created high competition among local contractors to involve in development of Iskandar Malaysia. Other than that, the presence of FDI gives positive impacts by offering more job opportunities, bring new and latest technology (compared to current local application) to local industry, and good project management. The lowest impact is creating opportunities to local contractors’ involvement. The highest criteria that become the primary problem to local contractors in terms of internal factors are related to financial reasons. For the external factor, the primary problem that was brought by FDI is related to lack of government supervision. The study provides factors impacted to construction industry in terms of social-economy among local construction players in Iskandar Malaysia Development. The result of this study helps as a reference to various parties to increase the participation of local contractors in the projects that are spearheaded by FDI. The study served a thought to create positive impacts to both local and foreign construction players in order to gain good outcome from the experienced development of Iskandar Malaysia as an economic hub.

8. References
[1] Liang, F., H. (2017). Does foreign direct investment improve the productivity of domestic firms? Technology spillovers, industry linkages, and firm capabilities. Research Policy, Volume 46, pp. 138-159
[2] Ghauri, P., N., & Firth, R. (2015). The Impact of Foreign Direct Investment on Local Firms: Western Firms in Emerging Markets. The Future of Foreign Direct Investment and the Multinational Enterprise. pp 379-405
[3] Iskandar property outlook seen positive. (2017 Feb 14) The Star Online
[4] Blalock, G., Gertler, P. (2009). How firm capabilities affect who benefits from foreign technology. J. Dev. Econ. 90 (2), 192–199.
[5] Rizzo, A., & Glasson, J. (2012). Iskandar Malaysia. Cities, 29, 417-427
[6] Iskandar Malaysia Secures Rm10.85 Billion In New Investments For Q3 2016. (2016, Nov 1) Iskandar Malaysia.
[7] Iskandar Regional Development Authority (IRDA), (2007). Information pack. JB. February.
[8] Growing population spur demand in Iskandar Malaysia (2017, April 20) New Straits Time
[9] IRDA, 2013. Official website of Iskandar Regional Development Authority (IRDA) retrieved from www.iskandarmalaysia.com.my. on 15 July 2013.
[10] PKMMJ minta kerajaan negeri pantau Iskandar (2014, July 23), Utusan Malaysia
[11] Iskandar Malaysia attracts total investment of RM32.15bil (2014, March 22) The Star Online.
[12] Aitken, J and Harrison, E (1999). Do Domestic Firms Benefit from Direct Foreign Investment? Evidence from Venezuela. The American Economic Review
[13] Mahalingam, A & Levitt, R E (2005). Understanding and mitigating challenges on global projects: the role of the freelance expatriate. In Proceedings of the ASCE Construction Research Congress 2005.
[14] Enshassi, A, Al-Hallaq, K and Mohamed, S (2006), “Causes of contractor’s business failure in developing countries: the case of Palestine”, Journal of Construction in Developing Countries, Vol. 11 No. 2, pp. 1-14
[15] Azhar, N, Farooqui, R U., & Ahmed, S M (2008). Cost overrun factors in construction industry of Pakistan. Proceedings from First International Conference on Construction in Developing Countries
[16] Ameh, J, Soyingbe, A, & Odusami, T (2010). Significant Factors Causing Cost Overruns in Telecommunication Project in Nigeria. *Journal of Construction in Developing Countries, Vol. 15*(2), 49–67, 2010

[17] Le-Hoai, L, Lee, Y D, & Lee, J Y (2008). Delay and Cost Overruns in Vietnam Large Construction Projects: A Comparison with Other Selected Countries. *KSCE Journal of Civil Engineering, 12*(6), 367-377.

[18] Adnan, H, Hashim N, Yusuwan M Y, & Ahmad N, (2011). Ethical Issues in Construction Industry: Contractor’ Perspective. Asia Pacific International Conference on Environment-Behaviour Studies, Salamis Bay Conti Resort Hotel, Famagusta, North Cyprus, 7-9 December 2011

[19] Rahman, H A, Karim, S B A., Danuri, M S M Berawi, M A, Yap, X W (2007). Does professional ethic affects construction quality?. Quality Surveying International Conference. Kuala Lumpur, Malaysia.

[20] Izik Z Arditi, David. Irem Dikmen & M Talat Birgonul. (2010). Impact of Resources and Strategy on Construction Company Performance, *Journal of Management in Engineering, Vol. 206,* No.1, pp. 9-18

[21] Lansley, P R (2002). Coorporate Strategy and Survivel in The UK Construction Industry. *Construction Management Economic Journal, Vol. 5,* pp 141-155

[22] Blomstrom, M and Kokko A (1998) ‘Multinational Corporations and Spillovers', *Journal of Economic Surveys, 12*(2): 1-31.

[23] Spencer, J W (2008). The impact of multinational enterprise strategy on indigenous enterprises: horizontal, Spillovers and crowding out in developing countries. Academy of Management Review, 33, 341–361

[24] Siti Hamidah A R, Intan R E, Nasruddin F, Soleyman P (2013). The Importance of Collaboration in Construction Industry from Contractors’ Perspectives. International Conference on Innovation, Management and Technology Research, Malaysia, 22 – 23 September, 2013

[25] Douma, M U, Bilderbeek, J, Idenburg, P J and Looise, J.K. (2000), Strategic alliances: managing the dynamics of fit. *Long Range Planning, Vol. 33,* pp. 579-98

[26] Al-Hammad and Sadi Assaf (1996). Assessment of Work Performance of Maintenance Contractors in Saudi Arabia, *Journal of Management in Engineering,Vol. 12*(2).

[27] Mc Caffer & Abd Majid (1997), Non-excusable delay in construction, cited from: https://core.ac.uk/download/pdf/2743478.pdf

**Acknowledgments**

This work was financially supported by Research University Grant 18H12, Research Management Centre, and research team members Green PROPMT. Thus, directly it is supported by Ministry of Education Malaysia.