Decisions Effectiveness Of FDI Investment Biases At Real Estate Industry: Empirical Evidence From Dubai Smart City Projects

Shanmugan Joghee, Haitham M. Alzoubi, Anil R. Dubey

Abstract— Dubai has proved as most economically active among the seven emirates of UAE and it has grown to be an important trade and investment center in the Middle East. In the last two decades, the international investment community has been attracted by the (Sheikh Mohammed bin Rashid Al Maktoum) ruler of Dubai for its infrastructural development. The purpose of the study is to analyze the international investor's behavior at Real Estate Industry in Dubai. Major real estate international investors have been listed in RERA and from 331 investors 131 investors has been accessible for conducting analysis. The multi-stage process has been used for sampling and for analyzing the investor behavior bivariate model has been used in the study. The result shows the significant relationship between FDI investor behavior and the investment performance of real estate projects in Dubai. Results also concluded that Dubai is a less risky place for investment due to study flow of FDI since last few years. Investors from Saudi- Arabia, Japan, UK USA and all over the world get high dividend-yielding return on the investment at the real estate sector in Dubai, except the period of global financial crises.

Index Terms— Investment Decision Making, Risk Tolerance, Investment Experience, Financial Knowledge, FDI.

1 Introduction

Globalization has amplified the competition among different regions of the world to attract the resources and investments for their economic development. The survival of the region in this intense competition depends upon the ability to gain a competitive advantage by attracting more investors and stakeholders [1]. This competitive advantage can only be achieved by using different techniques to promote uniqueness in the region [2], [3]. Local governments are required to adapt and act like businesses to make a strategic plan which supports the regional economic development [4], [5] [6]. In behavioral finance, the investors are assumed to be loss averse in spite of risk-averse. In risk aversion, the investors outweigh losses instead of equivalent gain and loss, which leads to flawed investment decision making. Studies suggest that the value of the loss is twice for investors as compared to profits [7]. This shows that the power of losses is more as compared to gains and if investors value the losses more[8]. Consequently, there is more uncertainty for investors to avoid possible losses [9]. It is a fact that investors are unable to understand that when to avoid losses and move forward on a way to stop those losses [10]. The real estate market of UAE has higher price stability as compared to other markets of India, Pakistan, Hong Kong and other countries. Real estate markets of UAE have the most outstanding features in which the market has maintained the price stability and remain resilient even during the recession [11].

The Gross Domestic Product of Dubai has increased from DH 390 billion (2017) to DH 398 billion (2018) at a growth rate of 1.9 per cent per year [12] [13]. A series of initiatives have been launched by Dubai to stimulate the growth rate of real GDP, which increases the economic activities, promote the growth process, facilitate the entrepreneurs, reducing the cost of business, investors with outstanding skill has provided up to 10 years of residence, modification of stay length, in an effort to be competent in the field of science and also local market demands can be entertained efficiently[14] [15]. There is found a significant relationship present between the real Estate of Dubai and GDP growth rate has been raised from 6.9 per cent (2017) to 13.6 per cent (2018) and the contribution of real estate has been raised from 6.2 per cent (2017) to 6.4 per cent (2018) [16]. A wide network of external trade has experienced by the Emirates of Dubai that expands continuously all over the world [17]. In last decade, huge oil revenues are the cause of rapid economic growth in UAE economy in contrast with other countries like China and India, which have been passed through various developmental stages to get the current position [18]. To preserve natural resources for the future, the UAE has focused more on alternative ways for its economic development. Before 2005, FDI investments in UAE were very scarce [19]. In 2005, $19 billion of FDI was attracted by the UAE and that was the substantial improvement of FDI as compared to previous years [20] [21]. Dubai has successfully transformed into a global city, tourism hub and regional business in the last two decades. It has been recognized as an economic and investment center with a superior international reputation[22]. The economy of Dubai is now diversified through real estate investments, tourism, travel, and finance and logistic[23]. Real estate FDI investment has been increased in the past few years and now UAE is going to launch different real estate projects in which Smart city projects are a priority. The vision of the UAE is to transform the Dubai city into a leading hub by the successful completion of those projects. For Smart city transformation five big real estate projects are under construction in Dubai which includes Blue Water Island (2019), Meydan One (2020), Marsa Al Arab (2021), Dubai Harbor (2021) and Dubai Creek Harbor (2021).

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2 Problem Statement

First smart city projects are ready to open in a few years and it's required a huge amount of capital for their development. A Strategic Plan is required to attract the investors for those FDI investments in smart city projects of Dubai. For that strategic plan, it is required to get information about the investment decision making of international investors in past few years and impact of these investment biases in the success of these projects to need to be analyzed.

Objectives

The main purpose of the study is to attract FDI for the successful implementation of smart city projects in the next few years. To enable a smooth and paperless transaction, the government is focusing on the implementation of the latest technology, which will be helpful to save time in future. For this purpose, it is required to analyze the investor's behavior in real estate projects of Dubai.

Research Question

Can investor behavior influence the investment performance of real estate investors in Dubai?

Rationale

The research study will be helpful the foreign investor while taking investment decision making in smart city projects of Dubai in future time.

Scope

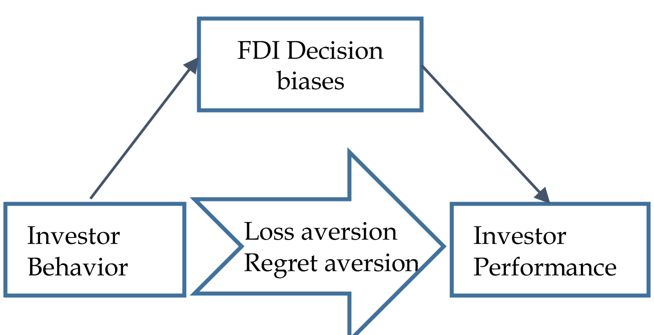
This Study will be helpful to make predictions for investor's decisions while investing in the smart city project.

3 Discussion of the Literature

In the Middle East, seven emirates of the UAE are the most economically active and has grown to be a major trade and investment center. The ruler of Dubai with business foresight makes some investments in the development of Dubai real estate infrastructure, to attract the FDI community, which results in good FDI inflow in the economy, since few years. This bold economic initiative has been beneficiary for the real estate sector of UAE. Investors from Saudi Arabia, Japan, UK, and USA and all over the world enjoyed the constant stream of high dividend yield returns on investment. This FDI inflow has been constant until the global economic crises after the tenure of George Bush in USA. The real estate sector in the Dubai Emirates has contributed about 22.5% of GDP, as shown by the reports of Dubai Government bureau of statistics [24]. Dubai is a major thrust in trade and investment, which has raised the foreign direct investments due to emirate's principal business entities. It has been found that 80 companies in India have recently visited Dubai for investment collaboration, which was led by Dubai investment Agency. Dunning and internationalization theory has been explained by Norman (2001), in which the paradigm explained the three conditions which help to increase FDI in firms that have specific ownership advantage which is not offered to other firms. The advantage could be tangible like patents on certain product and processes, superior technology, the organization size that creates transferable economies of scale and scope. The intangible advantages include good quality of product or trademark, brand name, goodwill [25], [26], [27]. Second, location advantages should be offered to international investors because it is more profitable rather than exporting from foreign markets. The cross border real estate investor should get an obvious advantage through investment in real estate projects of the country. Lastly, the internalization is beneficial for organizations instead of other contractual agreements which include joint ventures and licensing. It is good to own the development of real estate project rather than offering your services in a contract as a development manager. It is problematic that how to take advantage of internalization, ownership and location of cross border real estate developers. It usually depends upon the national and regional legislation of property rights. Due to issues related to government approval processes, domestic firms usually gain a competitive advantage as compared to foreign firms [28] [29]. Therefore, foreign property firms are expected to be interested in developing or acquiring property in the region of MENA that owns the domestic property rights or to those who have the local political understanding to protect the property development rights. Moreover, intangible assets may be the cause of competitive advantage which includes knowledge of the international market, world-class development delivery skills and marketing skills, human capital, project management and negotiation strength. The study of D'Arcy suggested that this organizational acquisition (OA) creates an impact on the competitive advantage of international market players over the country local players. Research of D'Arcy also shows the impact of organizational ownership on the level of internationalization: which has been elaborated by both development and investment activities. A higher level of internalization has found in investment activities as compared to development activities because developmental operational challenges are more difficult than cross border investments [30]. The important factor of UAE diversified and sustainable economy is inward foreign direct investment. The role of FDI has considered as a pillar in the development of a knowledge economy which helps on the steps and goals achievement of next stage progress of the nation up to the year 2021. Research shows that FDI serves the nation under appropriate conditions which includes host economy exports and employment, increasing capital formation, productivity spillovers to domestic firms through backward and forward linkages or local firm by hiring workers or imitating MNEs. The important factors for the diversification of the UAE economy and its conversion to a knowledge-based economy are the product, process, distribution technologies and marketing as well as management skills. For the UAE economy, FDI is particularly long to run socially beneficial. There is a massive increase in FDI of UAE from US$ 1 billion in 2000 (1% of GDP) to US$ 85 billion in 2011 (24% of GDP), which have been risen at 49% of growth rate which is higher as compared to other GCC countries. The average growth rate of FDI relative to GDP is 33%, which has been declared as the fastest growth rate in the region. In 2003, FDI rose to the US $7 billion (5.3% of GDP) which has been high as compared to the constant level of US $ 2 billion in the last two years. FDI stock of UAE has been raised from 2004 to 2011 as compared to Qatar, Oman, Kuwait and Bahrain which shows the attractiveness and competitiveness of the UAE as an investment destination. This attractiveness of investment has not only to occur in the GCC region but also within North Africa and the Middle East region. In 2001, FDI of UAE rose from US$ 1.2 billion (1.1% of GDP) and hit the highest point in 2007 to US$ 14.2 billion (5.5% of GDP). The FDI flow of UAE slightly declined in 2008 to US$13.7 billion (4.4 % of GDP). Global financial crises create an impact on FDI flows of UAE and decline up to 70% in 2009, to the US $ 4 billion (1.5% of GDP). In 2010 and 2011 the flow of FDI in the UAE slightly rise from 1.8% to 2.1% of GDP. FDI flow of UAE has exceeded from 2003 to 2008, as compared to the FDI flows of Qatar, Oman, Kuwait and Bahrain. Nearly 23% of FDI is accounted by financial institutions, 22 % in construction, 17% in real estate, for wholesale and retail trade its 14 %, in manufacturing its 10% and 7% in transportation and communication. The judgment of FDI sectoral distribution can also be done from cross borders mergers and acquisitions. Real estate and construction sector of UAE are the major sources of FDI. The inflow of FDI in UAE is generated from United States (US$2.4 billion), and United Kingdom (US$2.7 billion), Switzerland (US$5.3 billion), Luxembourg (US$ 13.1 billion), Italy (US$1.4 billion), France (US$1.5 billion) and Hungary (US$1.6 billion). The fellow GCC economies include Malaysia, India and China is also important sources of FDI in UAE (Mina, 2012). There is a significant role of regulations and institution in attracting foreign investors to invest in commercial real estate sectors. For example, political stability is considered as an important factor for long-run success, profitability and planning, whereas corruption is a real cause of the increase in cost and uncertainty. It is challenging for any investor to handle the corruption which affects the decision making process and results to make negative FDI decisions. Moreover, some investors can also get preferential access to cost-effective markets through corruption. Mostly, it is expected that weak institutions discourage FDI as compared to high-quality institutions, which are good in attracting investors for FDI investment. The increase in unemployment is found significantly and positively affects FDI (Salem, & Baum, 2016). The results of real estate investment in Dubai indicate that there is a massive increase in corporate investors as compared to individual investors since last few years. In 2018, the percentage of corporate investors has increased for 37.2 % (2017) to 40.2 % and the real estate individual investors has decreased from 62.8 % (2017) to 59.8% (2018). These results show that corporate investors are provided with more investment options, which effectively helps in generating huge real estate investments in its sector.

4 Study Design

4.1 Model of the Study



4.2 Study Hypothesis

- Ho: FDI Investor behavior does not influence the investment performance of real estate investors.
- H1: FDI investor behavior influences the investment performance of real estate investor in Dubai.

4.3 Study Methodology and data collection

In this study multistage sampling process is used for selecting the sample of study. In Dubai, real estate agents have been targeted to analyze the FDI behavior of investor in Dubai. Registered FDI real estate agents of Dubai from population have been taken in sample. Though many unidentified FDI real estate agents where enlisted with Real Estate Regulatory Agency (RERA). The real estate practices in Dubai are regulated by RERA and it maintains the record of all registered real estate agents of Dubai. The registered FDI real estate agents who are operating in Dubai were 87% and rest are not active at that time. There are 131 FDI real estate agents have been accessible out of 331. Multi-phase process has been used to access these investors. Multiphase sampling or multistage sampling is a process of sample selecting in two or more consecutive stages [31] [32].

4.4 Data analysis and Discussion

Fisher [33] has been recommended an equation below, which is used to determine the size of sample when whole population is greater than 10,000. Preferred size of sample is referred as n (when the population is greater than 10000), at a necessary level of confidence standard normal divergence is referred as Z, the targeted population whose characteristics have to be analyzed is denoted by p. The level of significance is referred as d, targeted population proportion is analyzed through q.

$$n = \frac{Z^2pq}{a^2} \qquad (1)$$

In formula, the values of p and q (0.5) are used in the study. Level of confidence is 95% based on the equation (1), minimum number of respondents used in this study is 100. Sample size used in this study having two successive stages. In first stage real estate agents are listed alphabetically which are operating in Dubai. From a sample of 50 investors, one investor is selected from each sample. A random systematic sampling is used to take the sample of 50 respondents. Whereas, in second phase 50 respondents were taken in sample, which makes total number of respondents 100 REI. The sensitive and confidential information have been sought out, which results in low response rate. This study is based on the information provided by the real estate investors about the results of their investments. The investor's information was quite confidential because it is related with business finance. Therefore, it is convenient to make oversampling up to 10% to retain the sample size of 100 respondents. For the purpose of study, series of procedures have been used for statistical modeling. First of all factor analysis have done. The proffered model has been selected which is based on the results of the model parameters. Secondly, the analysis of vicariate regression has been conducted and results drawn for the objectives. Resultant model residual is used after bivariate regression to test the homoscedasticity and analyze the appropriateness of the bivariate model among investment performance and FDI behavioral bias [34]. Coefficient of determination has analyzed through model fitness for the predictor on dependent variable. Specified model suitability has been analyzed through the variance (ANOVA).

$$REP = \alpha + \beta X \qquad (2)$$

Bivariate regression expression is used to determine the impact of FDI behavioral bias on performance. In this equation, Real estate performance is denoted by REP whereas, α is constant, rate of change of performance is analyzed through β with x which shows the unit change in predictor. Results of ANOVA and Bivariate Regression

Analysis as shown in following table 1.

Table 1
Bivariate regression Analysis

Statistical analysis of Dubai Real Estate market	
Country	Dubai
Mean	0.0100
Std. Dev.	0.0100
Skewness	-0.0251
Kurtosis	30.3702
Jarque-Bera	1.7 e 5
Beta	-0.4250
p- value	0.0000
t- value	-5.1220

5 Conclusion

In this study the effect of FDI investor behavior biases on the Dubai real estate investment performance have been analyzed. For that purpose, investor's level of agreement for various FDI investor behavior biases have been analyzed in Dubai. FDI investor behavior biases includes loss aversion and regret aversion. The study shows that the impact of FDI investor biases on the Dubai real estate investment is significant. The null hypothesis has been rejected Ho: Investor behavior does not influence the investment performance of real estate investors in Dubai, whereas the alternate hypothesis has been accepted. Table1 shows the analysis of standardized confident in which the value of beta is -0.425, t value is -5.122 and p value is 0.000. Therefore, the null hypothesis has rejected as the p value is < 0.05. The results concluded that FDI investment biases affect the real estate investment performance in Dubai. There are some implications in this study that the human behavior has some irregularity while calculating risk under uncertainty, which affects the investment performance. Moreover, findings also show that the FDI real estate investors are risk averse while choosing among risk or gains because losses hurt more than gain. But the FDI investors of Dubai use to take risk because the economy of Dubai has been booming since few years. The study also shows that Dubai is a safer place for investment because most of the FDI investors have enjoyed the constant gains while investing in Dubai real Estate projects except the period of global financial crises.

6 Recommendations

This study recommends that government body through the ministry of planning should remain in contact with real estate agents and try to make it easier for researcher for periodic publications regarding the behavior of FDI while investing in real estate projects of Dubai. A reliable source of information can be gained through this practice, provide insight to current price movements of real estate market. This information will be helpful for the FDI investors while taking viable investment decisions based on individual perceptions and market segments without relying on wrong information.

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