Moderating Role of Foreign Investor Characteristics on the relationship between Regulatory Factors of International Trade and Environmental Degradation in UAE

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ABSTRACT

The study has been conducted to analyze the moderating role of economic factors of foreign investor over the relationship between regulatory factors and environmental degradation in Dubai. The study has been conducted in Dubai considering the country as a fastest growing economy and attracting foreign direct investment in all fields. For the purpose of fulfilment of the study objectives the research developed two hypotheses. The hypothesis was tested over a sample of 335 responses generated from the executives of multinational firms of Dubai. The results confirmed that regulatory factors have a direct impact over environmental degradation, similarly, foreign investor characteristics also have a significant moderating role over the significant relationship between regulatory factors of foreign direct investment and environmental degradation. The study is important for the policy makers to develop such rules that negative influence over the environment may be curtailed.

Keywords: foreign direct investment, foreign investor characteristics, environmental degradation, regulatory factors.
INTRODUCTION

Research rationale aims to explore the link between regulatory performance indicators, investor profiles, and foreign direct investment in the United Arab Emirates. The allure of foreign direct investment (FDI), the demand for FDI, and its influence on the country's economy became one of the most important scientific, economic, and political concerns as the scale of globalization grew (Benfratello & Samiani, 2019). Countries that receive more FDI flows are deemed more competitive in the international arena than those in the same geographical region or at a similar stage of economic development (Hecock, 2019). In any event, the government should improve the country's economic governance abilities if it wants to boost the number and quality of FDI flows (Kim & Connor, 2018). Despite significant research, there remains debate about whether foreign direct investment (FDI) helps to economic growth (Boateng, Amponsah & Annor Baah, 2017; Elkomy, Ingham, & Read, 2016). The research presented by these authors, on the other hand, shows that FDI has a long-term negative influence on economic development.

Regardless of economists' widespread agreement on the overall favorable effect of FDI on a local economy, Cheng, Li, and Liu (2018) assert that there have been studies in the past indicating that FDI may have a detrimental impact under specific situations (Bakhsh, Rose, Ali, Ahmad, & Shahbaz, 2017; Smith & Thomas, 2017).

The empirical findings suggest that when a host nation has reached a specific level of development, beginning GDP, and human capital, FDI may increase economic growth (Kheng et al., 2017), which calls for further research in the field of FDI with regard to environmental issues.

The claim that FDI is more successful in imperfect markets is supported; moreover, a regression model was run between GDP growth and other factors impacting it, and it was established that FDI is more effective in emerging nations than industrialized economies (Olsson & Jungnelius, 2019). The empirical findings suggest that when a host nation has reached a specific level of development, beginning GDP, and human capital, FDI may increase economic growth (Kheng et al., 2017).

Correspondingly, the government of other nations, the government of Dubai had over the years encourage FDI by putting in place several strategies that attracts foreign investors, present them with attractive incentives that includes tax return—hence, over the years, UAE has become one of
the leading economies in the gulf area (Ibrahim & Acquah, 2021; Khan & Agha, 2015; Paleologos, Al Nahyan & Farouk, 2018).

The policies regarding FDI have grown in prominence in the global economy during the previous few decades. This may be attributed to dealing with globalization's rapid changes, the need to integrate into the global economy, and massive advances in information technology, telecommunications, and knowledge transfer (McCarthy et al., 2019). Given the possible problems, particularly in terms of exports and capital movement, it is difficult for a nation to stay insulated from these changes in these conditions (Cheng, Li, & Liu, 2018).

United Arab Emirates create policies to improve the FDI business climate with the goal of growing the UAE economy. As a result, the UAE has modified and rebuilt its FDI laws throughout time in order to create a strengthens its competitiveness in a global economy that is open to trade and capital mobility by creating a favorable investment climate (Ibrahim & Acquah, 2021; Khan & Agha, 2015; Paleologos et al., 2018).

Dubai's government has used FDI to transform its economy from a desert nation to one of the most sophisticated in the GCC area throughout the years. Science and technology, education, governance, and environmental inclusion are all covered by FDI. As a result, academics and practitioners have called the UAE "paradise on earth." The government also creates free zones, an easy investment process, a non-bureaucratic government, and legislative processes (Fernandez & Joseph, 2016; Vorley, Cotula & Chan, 2012). Likewise, strategic relationships with countries with the needed resources to achieve their objectives; examples of the countries are not limited to Egypt (Oxford Analytica, 2020) and the western world (Shkvarya & Rodin, 2019).

Some of the identified factors that contribute to long term adverse effects of FDI by earlier scholars are not limited to the impact of regularity dimension (tax rates, investment process, government and legislative processes, and financial institutions), economic dimensions and foreign investor characteristics are predominant factors that influence the inflow of FDI (Contractor, Dangol, Nuruzzaman & Raghunath, 2020; Farhani, Chaibi & Rault, 2014; Qamruzzaman & Jianguo, 2020).

The regulatory dimension had over the years be the focus of FDI scholars. For example, Khan and Agha (2015) account, the rate at which the UAE government enticing the FDI investors via tax
incentives, easy investment, and legislative process, had in the long run, causes environmental
degradation such as carbon dioxide emission and overpopulation. Likewise, there are claims from
the study of Farhani et al., (2014), Kivyiro & Arminen (2014) that made similar remarks
concerning increased CO2 emission and the influx of FDI.

In addition, the study by Samborskyi et al. (2020) identified characteristics such as capital
repatriation as among the foreign investors’ characteristics that is responsible for the complexity
and ambiguity observed on the consequences of FDI on environmental deterioration in the host
nation. In light of these claims, the researcher finds it urgent to reinvestigate the causal relationship
between the highlighted FDI regulatory and investors’ characteristics measured with country of
origin and capital repatriation on environmental degradation (that is, the negative effect of FDI
inflow). Samborskyi et al., (2020) suggested future scholars to explore the intervening connection
between foreign and domestic investors characteristics and regulatory dimension of FDI to
ascertain its real effects on the ambiguous and the complex effects of FID on environmental
degradation in a long run. Therefore, the main of the current research is to identify the moderating
role of foreign investor characteristics (country of origin and capital repatriation) over the
relationship between regulatory dimension of FDI and environmental degradation.

The study is significant for understanding regulatory issues, foreign direct investment
characteristics and its impact over environmental degradation in United Arab Emirates. The study
will contribute to the body of existing knowledge by proposing either theory of foreign direct
investment by explaining the environmental degradation along with the benefits.

LITERATURE REVIEW

Literature review analyzed current studies that are relevant to the topic of this study. One of the
most essential lessons for emerging market countries like the United Arab Emirates from the recent
global economic crisis is that long-term economic success would entail the development of
stronger regulatory institutions and a more diverse economy (Olawuyi, 2020). However, in the
recent decade, the UAE’s non-oil industries have improved, allowing it expected to grow and
become the second-largest economy in the world. Arab economy. The country was recently
classified as Asia’s seventh most strong economy (Al-Mejren, 2019).

Tourism, as well as aviation and sea transportation services, are important exports for the UAE.
Financial (including insurance), construction, and professional services are all net importers. Inflows of foreign direct investment (FDI) rose considerably over the period under consideration (Saidi & Prasad, 2018). Because of the global crisis, foreign direct investment (FDI) inflows have slowed slightly; as a result, The government has taken attempts to improve FDI data collecting, notably by source (Pigato et al., 2020).

An overseas investment made by a resident entity of one economy in the commercial operations of a resident entity of another economy in order to build a long-term partnership is characterized as Foreign Direct Investment (FDI) (Ajayi et al., 2019). Foreign direct investment has the ability to force local enterprises out of business and hinder economic growth.

International commerce is the only method to engage in the global market if markets run properly and there are no trade or competition obstacles (Carboni et al., 2018). On direct investment, Kindleberger (1969) claims that local enterprises are invariably more knowledgeable about the local economy. Two requirements must be met in order for foreign direct investment to occur. Foreign companies must have certain advantages that make such an investment profitable, and the market for these advantages must be imperfect. Foreign direct investment (FDI) is a sort of capital that moves across borders from one country to another and is reported in the balance of payments (Lipsey, 2003). The variables of interest include capital flows and stocks, as well as investment revenues (Colombo et al., 2019).

Macroeconomically, FDI is considered as a type of cross-border capital flow between home and host countries. This is represented in a country's balance of payments statement, where capital flows and stocks, as well as revenue earned from such investments, are the variables of interest (De Mello, 1997). This is in line with Shin (1998), who analyzed existing FDI theories and named a number of scholars who classified FDI concepts in the same way.

Defining and assessing the effect of FDI is a difficult task, especially when the amount of FDI is large yet inconclusive in several key areas. Nowadays, money flows are intangible, short-term yet crucial, and not always quantitative, but rather virtual and complicated. Furthermore, the FDI understands the difficulty in explaining why FDI in transition nations is more difficult stated than done. In industrialized and democratic nations, FDI behavior, modes, and projections differ from those in transition countries, which are flawed and primitive (Bandelj, 2011). In general, FDI refers to the process of transferring critical assets, such as financial capital, technology, human resources,
knowledge, and experience.

According to Aliber (1970), source countries with problematic currency can borrow at a lower interest rate than host country firms because portfolio investors ignore the source country's foreign characteristic (VanDuzer & Leblond, 2020). Although firm behavior (a microeconomic element) influences FDI location in terms of motives for location, such as resource, market, efficiency, or strategic asset seeking, the overarching decision is made based on economic geography, which is a macroeconomic decision because it takes country-level characteristics into account (Popovici & Calin, 2014).

FDI success is determined by a country's national wealth, which includes natural resource endowment, labor availability, local market size, infrastructure, and government policy toward these national resources, according to the FDI theory (Lu et al., 2020). This location-based concept has spawned the gravity approach for FDI. Previously, it was thought that FDI flows between two countries would be greatest if they were geographically, economically, and culturally similar (Makoni, 2015). Size, development level, distance, common language, and additional institutional elements like shareholder protection and trade openness were all shown to be significant predictors of FDI flows (Popovici & Calin, 2014).

**Environmental Degradation**

Findings in the Chinese context by Zomorrodi and Zhou (2017) attests to the claim that FDI inflow has a significant relationship with environmental degradation. Therefore, the authors suggest implementation of environmental policies to curb any potential or ongoing harm resulting from foreign investors’ attitude in China. Taking a step further, Dhrifi, Jaziri and Alnahdi (2020) argue that FDI inflow do not only cause environmental degradation in developing countries, it also influence poverty rate in emerging economies. Additional findings supporting the relationship mentioned above is that of Tamazian, Chousa and Vadlamannati (2009) claiming that the higher the financial and economical development has a significant relationship to company degradation. Likewise, the study carried out in the Malaysian context by Hitam and Borhan (2012) concludes a significant relationship between FDI inflow and environmental degradation.

While Sabir et al. (2020) deny the premise that FDI influx has a negative significant link with environmental degradation, they contend that political institutions, institutional quality, and the
rule of law have an inverse effect on FDI inflow and environmental degradation.

Overview of Regularity Dimension

The regulatory dimension of FDI has received considerable attention from scholars and practitioners globally (Contractor, Dangol, Nuruzzaman, & Raghunath, 2020; Cheng, Li & Liu, 2018). Evidence from the available studies reveal that host country regulations have effects on FDI inflows and operations. For example, Contractor et al. (2020) argues that regulatory has influence on FDI entry, profit appropriation, ease of doing business and foreign investors’ operation. Likewise, Kapuria and Singh (2019) attest that regulation controls corrupt practices, long run carbon emission that has negative effect on the climate, trademark application among other listed effect of regulations. On the account of Feng et al. (2019), regulatory had influence not only on FDI inflow, but it also has influence on innovativeness and urbanization that ion the long run has a negative influence on the environment in the Chinese context. On this note, the authors suggest regulatory policies that will address and enhance uneven innovativeness and urbanization in the study context and address potential environmental concern.

Although reports from scholars show the significant influence of regulatory dimension on the effect of FDI on the environmental protection, there are indication that one of the most favored regulatory process ‘taxes’ had little to no effect on the environmental concern on the FDI activities (Kirkpatrick, Parker & Zhang, 2004; Ullah, Zhao, Abdul Kamal & Zheng, 2020). Instead, tax had been argued to be a double headed sword that is being used to invite and restrict FDI activities (Bruhn, 2014; Hoekman & Saggi, 2000; Margeirsson, 2015).

Tax incentives are a global strategy which, according to Marjanović (2018), is among the tools that the government uses to lure in foreign investors to the host countries to enhance the economic growth rate. Hence, scholars had vested significant interest in examining the effectiveness of tax incentives on FDI inflow and its effects on the environment (Beyer, 2002; Domazet & Marjanović, 2017; Easson, 2004 Li, 2006; Marjanović, 2018; Van Parys & James, 2010).

Insights into the works of these scholars reveal that the effects of tax incentives could not be ascertained. For example, an analysis conducted by Beyer (2002) concerning the effect of tax incentives on FDI reveals little to no effect. Also, Van Parys and James (2010) investigation failed to ascertain robust tax incentives and FDI inflow among Francophone countries in the African
region. Thus, question the introduction of tax incentives to foreign investors.

Nevertheless, Beyer (2002) did not rule out the influence of the host country's political climate. Contrarily, an earlier investigation by Tung and Cho (2000) believed that the Chinese government's tax incentives help bring in foreign investors into the targeted area. Likewise, Van Parys and James (2010) conclude that legal guarantee and reduction in the tax bureaucratic nature help invite foreign investors. Meanwhile, in the Serbian context, a recent study by Marjanović (2018) asserts the importance of tax incentives in luring foreign investors to invest and help build the economy, affirming the stance of Tung and Cho (2000) on the study conducted in the Chinese context.

This regularity dimension study proposed in the model such as (tax rates, access to free zone, investment process, government and legislative processes, foreign investment, international trade, financial institutions, and judicial structure), of the investor characteristics of foreign direct investment in UAE constructs. The following is the discussion of the regularity dimension relations.

**Tax Rates**

The proportion at which an individual or company employs a progressive tax rate system, in which the percentage of tax charged grows as the amount of taxable income of the person or organization increases, is known as a tax rate definition. The amount collected from higher-income taxpayers is referred to as a progressive tax rate amount (Toma, 2019). The amount and mix of taxes vary widely between countries, but there are a few aspects that are universal. Many countries have cut personal and corporate tax rates while expanding the tax base and increasing social security contributions (Bazel & Mintz, 2020).

Meanwhile, the use of Value Added Taxes (VAT) has increased, and there has been a general tendency toward higher VAT rates. Several nations deviate from the norm. Iceland, Italy, Portugal, and Spain are just a few examples of nations that increased their tax-to-GDP ratios by more than 10% over time (although all starting from lower than average tax levels). Despite some considerable variances in the allocation of tax burdens among tax instruments, income taxes, taxes on goods and services, and social security payments account for the bulk of a country's revenue (Osho et al., 2019).
Furthermore, economic variables may play a role in explaining variances in financial success. The structure of the tax system can affect GDP per capita through affecting the number of hours worked in the economy (labour utilisation) and the amount of output produced per hour (labour productivity), or both (Johansson et al., 2008). The two forms of consumption taxes are general consumption taxes, such as VAT or sales tax (which are applied to a wide range of products and services), and specific consumption taxes, such as excises and import duties, which are applied to a restricted number of goods and services (Pfinder et al., 2020). Some taxes, on the other hand, may have an influence on a variety of development sources at once, and in diverse ways. By analyzing the rows in the matrix, it is possible to assess the impact of a tax policy, the average personal income tax wedge, on all the drivers of growth.

**Access to Free Zone**

Free zones are known by several names in different nations, such as export processing zones, free trade zones, and special economic zones, but they all pertain to the same concept (Aggarwal, 2019). Even though the word export processing zones is defined as 'free zones,' this term is employed in this study because of the diversity in the names of these zones, which represents the dynamic nature and specific function of each zone (Contreras et al., 2020). When multiple definitions for free zones are observed, defines free zones as fenced-in regions that specialize in export production and give enterprises free trade conditions and a liberal regulatory environment (Cheng, 2018).

Similarly, defines a free zone as a government policy to boost product and service exports by providing unique incentives, such as tariff exemptions for inputs in a geographically defined region, to create a more competitive business climate (Friedrich & Nam, 2019). The export processing zones' main goal is to provide special incentives and infrastructure for export-oriented businesses. The "free port," a broader notion that typically encompasses larger territories where a range of activities, such as tourism and retail sales, are carried out, is the other kind of these zones, in addition to expedited trade operations. It is permissible for people to reside on-site (Jahangir et al., 2020).

Free zones might also differ in terms of a company's ability to sell its products in the host country. Various countries allow varying amounts of free zone manufacturing to be sold on the local market after paying the required import tariffs on the final products (Wagner, 2017). The earlier zones
were set up and managed by government agencies. However, an increasing number of zones have been established and are operated by private corporations in recent years (Powell & Yurchenko, 2020).

**Investment Process**

The building of roads, railroads, schools, offices, hospitals, private residential dwellings, and commercial and industrial structures are all included in the gross domestic fixed investment process (Elheddad, 2019). Higher investment may improve economic growth since investment is a primary determinant of growth rate. Furthermore, the rate of physical capital creation and the rate of economic growth in a country have a positive link (Benfratello & Samiani, 2019). The researchers examined the link between foreign investment, trade openness, capital formation, and economic growth rates and discovered that the amount of foreign direct investment and capital formation had significant positive effects on real GDP changes. The investment process and GDP growth in nations with transition economies from a different perspective, revealing and formulating the regularity of the country's GDP growth rate shift influence (Kononenko & Repin, 2016).

The investment management process explains how an investor should go about making decisions, and the method can be revealed the procedure, which includes Setting investment policy, studying and evaluating investment vehicles, constructing a diverse investment portfolio, portfolio modification, and portfolio performance assessment are all steps in the investing process. and evaluation (Höglund & Mellblom, 2019). In terms of the investor's investment return demand and risk tolerance, the investment policy is the first and most important phase in the investment management process (Alber & Gamal, 2019). Other key restrictions that might impact investment management constraints should be stated in the investment policy, such as the investor's liquidity demands, estimated investment horizon, and various individual wants and preferences.

**Government and Legislative Processes**

The general policy framework for foreign investment, which includes economic, political, and social stability, as well as legislation affecting foreign investment; (b) economic determinants, such as market size, resource costs, and other inputs; and (c) economic determinants, such as market size, resource costs, and other inputs (e.g., labor costs), or the availability of natural
resources; and (c) business facilitation, which includes investment promotion and incentives (Hippolyte, 2019). Overall, developing nations will gain by participating in political and legislative processes in order to improve their attractiveness to FDI and hence their chances of receiving more FDI (Wu, Zhou, Park, Khan, & Meyer, 2021).

Developing nations, on the other hand, may incur expenditures as a result of requirements incorporated in government and legislative procedures. These accords reduce capacity to take required legislative and administrative acts to advance and safeguard their national interests, so limiting their sovereignty (Bowen & Broz, 2020). General laws and regulations that may affect an FDI decision, based on other legislative procedures, may include labor market legislation, environmental restrictions, and financial market regulation.

**Foreign Investment**

Foreign investment is defined as investments made by citizens of one country in the financial assets and production processes of another, with the impact varying by country (Goldar & Banga, 2020). Foreign direct investment is a medium to long-term investment in direct industrial operations, whereas foreign institutional investment is a short-term investment, mostly in financial markets (Garca & Vidal, 2020). Foreign investment can have bidirectional causation with the returns of other local financial markets, such as money markets, stock markets, and foreign currency markets, due to its short-term nature (Babalos et al., 2021).

As a result, understanding the causes of foreign investment is critical for every growing country, as foreign investment has a greater short-term influence on local financial markets and a longer-term impact (Khan et al., 2020). The political Strings claim that Many times, foreign money comes with particular restrictions linked to it; in order to gain profits, the borrowing country's monetary, fiscal, industrial, and commercial policies must comply with the donor country's requirements and conditions (Weintraub, 2019). Furthermore, because of the establishment of businesses supported by foreign capital, domestic producers suffer as a result of the fall in domestic construction in the economy. They are unable to compete with international firms (McGrattan & Waddle, 2020).

**International Trade**

In a fast-paced corporate climate characterized by changing markets and the impact of globalization on specific developments, marketing strategy decisions are critical (Brannen et al.,
Furthermore, market research conducted to investigate the relationship between consumer interest and attitudes toward organization items, as well as the impact of local culture on marketing activities, play essential roles (El Banna et al., 2018). It's also important to consider per capita income in the target market when determining how marketing policy changes would affect potential clients (Godey et al., 2016). As a result of the globalization process, international trade appears to be promoted, with a market outside the borders of the home country, and international trade mostly refers to cross-border trade in goods and services (Bryant & Javalgi, 2016).

Due to international trade, consumers in various countries can purchase goods and services manufactured elsewhere, implying significant resources, as border crossing requires certain costs, such as taxes, and economic, social, cultural, legislative, and political differences between countries, multinational organizations play an important role in the development of international trade, among other factors such as globalization and outsourcing. Multinational organizations play an important role in the development of international trade, among other factors such as globalization and outsourcing (Atkin & Khandelwal, 2019).

Globalization is a process of global integration that has accelerated as a result of increased global interchange of goods, services, and other commodities, as well as the effects of other cultural and social elements (Pindzo & Radulovic, 2017). Globalization has affected the growth of investments in numerous nations, as well as the development of international trade and communication. In the economic sphere, globalization refers to the interconnectedness of economies as a consequence of greater cross-border movements of goods, services, and capital (Baylis, 2020). Production processes, finances, markets, institutions, and the labor force are all affected by economic globalization. World economies are getting increasingly interwoven, and more nations are joining the global economic integration process (Karlsson et al., 2018).

**Financial Institutions**

Unless the government intervenes, many people's money might be lost if financial institutions collapse. Systemic risks or system-wide breakdowns among any group of financial institutions, maybe owing to contagion, could not be managed by our current regulatory mechanisms (Salter, 2019). Recent regulatory developments have raised the amount of competition among financial institutions by allowing them to engage in new activities (Friedman & Heinle, 2019). As a result, authorities have been pushed to devise more complex risk metrics and incentives for institutions.
to reduce risk. The globalization of financial markets has reached unprecedented levels in recent decades (Pesendorfer, 2020).

**Judicial Structure**

The impact of judicial efficiency on a country's capacity to attract foreign direct investment flows, in particular, and if judicial efficiency is the institutional channel via which advanced countries' FDI patterns are set (Pigato et al., 2020). However, both along the extensive and intense margins, the geographical distribution of foreign direct investments in advanced economies varies significantly (Donaubauer et al., 2020). The institutional channel that impacts the pattern of FDI across nations is judicial efficiency, and there is a strong relationship between judicial efficiency and contract enforcement on foreign direct investment inflows across multiple study parameters (Bokpin, 2017). The impact of judicial efficiency on a country's capacity to attract knowledge-capital intensive investments, or foreign operations that are more susceptible to efficiency losses owing to information transfer, such as firm-specific assets, trademarks, know-how, and patents (Cao & Rees, 2020).

**Foreign Investors Characteristics**

Over the past few years, Scholarly evidence reveals that scholars have developed a keen interest in identifying the influence of foreign investors’ characteristics on the overall FDI process. Not only that, but they have also had a great interest in understanding why such characteristics existed (Cho, 2021; Covrig et al., 2006; Dahlquist & Robertsson, 2001; Ko, Kim & Cho, 2007; Mita, Utama, Fitriany & Wulandari, 2018; Zou, Tang & Li, 2016).

In comparison, characteristics such as the direct ownership related to institutional and firm characteristics were examined by Dahlquist and Robertsson (2001). Furthermore, recent studies not limited to Bednarzewska (2017), Marjanović (2018), and Cho (2021), have investigated various foreign investors characteristics that include their actions in the stock market, selected investment, and the host cities characteristics and country of origin on their actions and decisions on host country economy and environment.

Findings from these scholars investigating foreign investors’ characteristics over the years have generated inconclusive evidence on the overall FDI impact on the environment. The statement thus implies that irrespective of the environmental impact of their investment choice, once the returns
are high, such investment is good for them. In return, they are less concerned about the environment in which they are operating.

In contrast, an earlier investigation by Dahlquist & Robertsson, 2001) failed to support this stance. Instead, the authors argue that the host country’s institutions are less concerned about their environment based on institutional bias. Supporting the argument by Dahlquist & Robertsson, 2001) is the evidence presented by Zou et al. (2016), claiming that local investors have the upper hand in selecting their choice of investment over foreign investors in the Chinese context. Hence, they believe that local investors do more harm to the environment.

Further evidence from earlier investigations, examples of which are not limited to Bednarzewska (2017), Hong (2007), and Head and Ries (1996), revealed why foreign investors prefer a particular location over others and their long-term effect over time. Also, characteristics such as foreign work experience and exposure and foreign investors’ exposure in their country of origin play a significant role in firms’ adoption of foreign practices (Shin, Seidle & Okhmatovskiy, 2016).

Despite the presented foreign investors’ characteristics presented above, the attention of this researcher is drawn to foreign investors country of origin. The rationale behind selecting this construct lies on the evidence presented in earlier literature stating that the origin of foreign investors influences how they behave and their decisions in host country which in turn have influence on the host country environment (Henisz & Zelner, 2005; Luo, 2007).

Investors’ country of origin had over the years be among the focus theme of scholars investigating the features or characteristics of foreign investors (Yao & Tang, 2021). Evidence from these scholars reveal that foreign investors’ country of origin plays a significant role in environmental degradation. The crucial rationale for this argument is the difference in environmental concern and policies governing corporate social responsibility ‘CSR.’

For example, the study of Yao and Tang (2021) revealed that, in the developed country where environmental policy is prioritised, direct and indirect foreign investment financing has a negative impact on the environment. However, in the developing economies where less attention is given to environmental development a positive correlation between direct and indirect foreign capital investment was recorded. Further findings from these scholars also argue that financial structure is positively correlated with carbon emission. That is, those foreign firm with larger capital inflow
tends to destroy the environment by emitting more carbon into the atmosphere. Contrarily, an investigation by Yu and Zheng (2020) concludes that foreign investors in the Chinese context prefer locations with active CSR policies and reporting, this is because, it helps firms with the needed information that concerns the environment.

RESEARCH FRAMEWORK AND HYPOTHESIS

The research framework in Figure 1 illustrates the relationships between the exogenous variable i.e., regulatory dimension of FDI, foreign investors’ characteristics (country of origin and capital repatriation) and environment degradation. Considering this, the research framework for this study is presented in figure 3.1.

![Figure 3.1 Research Framework](image)

Literary evidence from previous literature reveals that there is a significant relationship between regulatory dimension of FDI and environmental degradation. For example, a recent study by Kapuria and Singh (2019) argues a significant relationship between regulatory dimension of FDI and environmental degradation. Similarly, Feng et al. (2019), Kirkpatrick et al. (2020) all believed that there is a strong relationship between regulatory dimension of FDI inflow and environmental degradation. Considering this, the researcher proposes the following hypothesis:

H1: There is a significant relationship between regulatory dimension of FDI and environmental degradation.

Moreover, the regulatory dimension of FDI has a substantial association with environmental deterioration, according to previous study. (Contractor et al., 2020; Cheng et al., 2018; Kapuria & Singh, 2019; Feng et al., 2019). Some few studies failed to agree with the notion on this relationship (Kapuria & Singh, 2019; Kirkpatrick et al., 2004; Ullah et al., 2020). Thus, adhering
to postulations by Baron and Kenny (1975) on introducing a moderator into a research model wherever there are mixed evidence which is the scenario observed in this research. On this note, the researcher introduces foreign investors’ characteristics as a potential moderator moderating the relationship between regulatory dimension of FDI on environmental degradation. Moreover, there are propositions that foreign investors’ behaviors and sense of responsibilities are guided by their characteristics not limited to exposure to CSR programs in their home countries (Yao & Tang, 2021; Yeh, 2021).

H4: There is a significant moderating effect of foreign investors' characteristics (country of origin and Investor Expansion Strategy) on the relationship between regulatory dimension of FDI and environmental degradation.

RESEARCH METHODOLOGY

The research technique for this study is described in research methodology. In the context of the UAE, this study uses a quantitative research technique to examine the structural link between the regulatory dimension of FDI, foreign investors' characteristics (country of origin and capital repatriation), and environmental degradation. According to Kadam and Bhalerao (2010), researchers need to identify a study population in any research study. There are 523 FDI projects in Dubai, with more than 40% of them being middle or big businesses. Only specific level of employees (Managers) could participate in the study (Sekaran & Bougie, 2016). The entire population is 2615, and the Morgan Kerjice formula suggests that a sample size of 335 is appropriate.

This present research adopts instruments from previous empirical investigations to maximize the instrument's reliability and validity (Hays & Revicki, 2005). Variables in this research work are measured using the 5-point Likert scale (Hair, Sarstedt, Ringle, & Mena, 2012). Environmental degradation in this research include spillage, carbon emission, population congestion and deforestation (Adeyanju, 2012; Eweje, 2006; Okumu & Fee, 2019; Idemudia & Ite, 2006). The items used in measuring environmental degradation were adapted from the arguments and empirical findings from the earlier study conducted by Adeyanju (2012). Likewise, this study describes regulatory dimension of FDI as the mechanisms, rules and procedures put in place by the host country to foreign investor to check balance their operational actives. Hence, the instruments used in measuring regulatory dimensions of FDI are adapted from previous empirical
findings, arguments, and questionnaire from the earlier scholars (Adeoye, 2007; Al-Junaibi, 2004; Fernandez & Joseph, 2019; Khan, Lee & Bae, 2018). Moreover the items for measuring foreign investor’s characteristics were measured using the prior literature Bollen, Hassink and Bozic (2006), Luo (2005). The framework and hypothesis have been tested using structural equation modeling after conducting the tests for reliability and validity of the instruments.

ANALYSIS AND FINDINGS

Initially the reliability and validity of the adopted instrument has been analyzed before analyzing the structural model. The results of reliability and validity are mentioned in table 1 below:

Table 1
Reliability and Validity

<table>
<thead>
<tr>
<th>Variables</th>
<th>Cronbach's Alpha</th>
<th>Average Variance Extracted (AVE)</th>
<th>Composite Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental Degradation</td>
<td>0.894</td>
<td>0.654</td>
<td>0.919</td>
</tr>
<tr>
<td>Regulatory Dimension</td>
<td>0.876</td>
<td>0.614</td>
<td>0.905</td>
</tr>
<tr>
<td>Foreign Investor Characteristics</td>
<td>0.938</td>
<td>0.765</td>
<td>0.951</td>
</tr>
</tbody>
</table>

Cronbach’s alpha, Average Variance Extracted (AVE), as well as composite reliability values ensure that the instrument is reliable and valid because all the calculated values are correct as per the threshold levels (Henseler, Ringle, & Sinkovics, 2009; Hair, Ringle, & Sarstedt, 2013). Furthermore, the discriminant validity of the Fornell-Larcker criterion has been established by comparing the square root of AVEs which is the diagonal entries with the relationships among constructs that is the off-diagonal entries (Claes & Larcker., 1981; Sarstedt, M.Ringle, Smith, Reams, & F.HairJr, 2014). The findings of the discriminant validity analysis by applying the Fornell-Larcker criterion are mentioned in table 2.

Table 2
Discriminant Validity

<table>
<thead>
<tr>
<th>Variables</th>
<th>Environmental Degradation</th>
<th>Foreign Investor Characteristics</th>
<th>Regulatory Dimension</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental Degradation</td>
<td>0.809</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Foreign Investor Characteristics</td>
<td>0.586</td>
<td>0.875</td>
<td></td>
</tr>
</tbody>
</table>
The Structural Model

After ensuring the reliability, validity, and discriminant validity of the instrument used to measure the study variables, structural equation modeling has been applied to test the two hypotheses developed on the basis of literature review and underpinning theories. The findings of hypothesis testing are mentioned in Table 3 below.

Table 3
Hypothesis Testing

| Hypothesis | (O)  | (M)  | (STDEV) | T Statistics (|O/STDEV|) | P Values |
|------------|------|------|---------|-----------------|---------|
| Regulatory Dimension -> Environmental Degradation | 0.514 | 0.519 | 0.081 | 6.376 | 0.000 |
| Regulatory Dimension * Foreign Investor Characteristics -> Environmental Degradation | 0.324 | 0.312 | 0.143 | 2.261 | 0.002 |

The results of H1 showed that there is a significant relationship between regulatory dimension and environmental degradation (β=0.514, t=6.376, p=0.000) that is supported. H2 indicates that there is a significant moderating effect of foreign investors’ characteristics on the relationship between regulatory dimension of FDI and environmental degradation (β=0.324, t=2.261, p=0.002). The overall calculated value for R² of the model revealed that explained variation determined by the model is 44.3 % and without moderator the calculated value is 39.2 %.

Furthermore, the predictive relevance of the model has also been calculated Stone-Geisser test of predictive relevance (Geisser, 1974; Stone, 1974). The Q² value of the Crossvalidated redundancy for endogenous latent construct (Environmental degradation) was 0.275 assessing that the structural model of this research has predictive relevance (Chin, 1998; Henseler, Ringle, & Sinkovics, 2009).

DISCUSSIONS CONCLUSIONS AND RECOMMENDATIONS

The main objective of the current research was to investigate the moderating role of foreign investor characteristics between regulatory dimension and environmental degradation. The first
specific hypothesis was found significant. Likewise, the second hypothesis was also found significant that foreign investor characteristics holds significant moderating role between regulatory dimension of FDI and environmental degradation.

**Implications of the Study**

The combination of regulatory dimension and economic dimension in a single model as international trade which are affecting environmental degradation has obtained little attention and the current study has filled this gap. The study adds to the body of knowledge on the significance of foreign investor characteristics (classifying of foreign direct investment theory, explanation of foreign direct investment theory, macroeconomic of foreign direct investment theory) in predicting environmental degradation. Thus, this research contributes to the FDI Theory (classifying of foreign direct investment theory, explanation of foreign direct investment theory by providing evidence empirically to encourage the arguments of the theory. Furthermore, the results make other expected contributions to international trade, regulatory literature by explaining the role that foreign investor characteristics over environmental degradation. The findings further improve researchers' knowledge on the moderating role of foreign investor characteristics on the regulatory dimension and environmental degradation since few studies have mentioned this role (A. Bokpin, 2017; Cheng, Li, & Liu, 2018; Feng, Wang, Du, Wu, & Wang, 2019; Dhrifi, Jaziri, & Alnahdi, 2020).

Like any quantitative study this study also has certain limitations. This study is cross-sectional and the data is gathered in 2021 which can be examined as little period due to the constraint of time as well as resources. The study sample was also small while it was representing the UAE employee or managers under senior executives. For overcoming the limitations, the research recommends that future studies will be conducted by applying other variables such as, economic dimension. In addition, a follow-up study also investigates employees' or managers perspectives on their international trade dimensions. This kind of research might be beneficial in determining the potential or lack of regulatory dimensions of FDI and economic dimension of FDI in environment. Finally, the importance of international trade is vital that future studies in international trade practices can be organized in other UAE regions to validate the gap in foreign investor characteristics as a basis for making environmental decisions about focusing them (Alkathiri, 2020; Cheng, Li, & Liu, 2018).
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