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The Impact of Economic Diplomacy of the UAE Foreign Policy on Bilateral Foreign Investment and Trade: An Empirical Approach

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Declaration of Original Work

I, Fahad Obaid Mohamed Al Taffaq, the undersigned, a graduate student at the United Arab Emirates University (UAEU), and the author of this dissertation entitled "*The Impact of Economic Diplomacy of the UAE Foreign Policy on Bilateral Foreign Investment and Trade: An Empirical Approach*", hereby, solemnly declare that this dissertation is the original research work that has been done and prepared by me under the supervision of Dr Fernando Zanella, in the College of Business and Economics at UAEU. This work has not previously been presented or published or formed the basis for the award of an academic degree, diploma or a similar title at this or any other university. Any materials borrowed from other sources (whether published or unpublished) and relied upon or included in my dissertation have been properly cited and acknowledged in accordance with appropriate academic conventions. I further declare that there is no potential conflict of interest with respect to the research, data collection, authorship, presentation and publication of this dissertation.

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Abstract

Economic diplomacy is a political approach regarding how a country seeks to deal with other countries to maximise their national gains in various areas through obtaining a comparative advantage against others that do not use such political practices. This study examines the potential role of economic diplomacy in the foreign policy of the UAE and its impact on the trade and investment flows for 18 years (1999-2016). The study objective is to assess the effectiveness of diplomatic entities, such as embassies and consulates and signed legal agreements on delivering the desired trade and investment outcomes. The research method is a quantitative econometric gravity model of the UAE-X countries based on the Generalized Gravity Theory (GGT), which is suitable for assessing trade and investment determinants. Thus, two augmented gravity models for trade and investments were built to determine the impact of the independent variables on trade and investments. Panel data format was used to run a random effect generalised least square regression with robust standard errors and the dependent variable being the total trade and total investments. The generated results provided support information for making the right decisions to sign the bilateral or multilateral agreements by the diplomatic entities and even perform due diligence to assess doing trade or investments in various regions in the world. The UAEs' global trade potential reveals that the effects of economic diplomacy are seen in East Asia, the GCC, Europe, and African counties, while the investment potential was focused on East Asia. The findings offer indirect support for the emerging literature on new and intangible barriers or enablers to trade and investments. Towards this end, higher income countries tend to have more flow of trade and investment with the UAE through the positive impact of having embassies and trade offices, along with signed agreements. Moreover, the low impact of economic diplomacy means with the Caribbean and Pacific islands is due to limited infrastructure and trade facilitation and no availability of data. Besides the findings mentioned above, this study opened up several questions for future research. Among these questions, why some economic, diplomatic tools are insignificant, ineffective, and sometimes unfavourable from one region to another?

Keywords: Foreign policy, diplomatic entities, commercial attaché, economic diplomacy, international cooperation, foreign aid, foreign direct investment, UAE.

Title and Abstract (in Arabic)

دور الدبلوماسية الاقتصادية في السياسية الخارجية لدولة الإمارات العربية المتحدة وانعكاساتها على التدفقات التجارية والاستثمارية

الملخص

يشار إلى الدبلوماسية الاقتصادية على أنها العملية والطريقة التي تسعى بها البلدان للتعامل مع البلدان الأخرى لتحقيق أقصى قدر ممكن من مكاسبها الوطنية في مجموعة متنوعة من المجالات. عبر القيام بذلك تسعى تلك الدول للحصول على ميزة مقارنة تجاه الدول التي لا تستخدم مثل هذه الأدوات أو الممارسات. في رسالتي هذه، بحثت دور الدبلوماسية الاقتصادية في السياسة الخارجية لدولة الإمارات العربية المتحدة وتأثيرها على تدفقات التجارة والاستثمار لمدة 18 سنة من عام 1999 حتى عام 2016. حيث أن الأهداف الرئيسية هي تقييم كفاءة وفعالية أدوات دبلوماسية اقتصادية مثل فتح بعثات أو زيادة عدد البعثات القائمة، بالإضافة إلى إبرام اتفاقيات اقتصادية ثنائية، في تحقيق النتائج المرجوة على التجارة والاستثمار، وكذلك على المستوى السياسي الثنائي ومتعدد الأطراف لدولة الإمارات العربية المتحدة. وعلاوة على ذلك، قمت بدراسة العلاقة المتبادلة بين النتائج المرغوبة في التجارة والاستثمار والاتفاقيات سواء الثنائية أو اتفاقات التجارة الحرة الموقعة على المستوى المتعدد الأطراف من خلال دول مجلس التعاون الخليجي وتأثيرها على تدفق التجارة والاستثمارات مع جميع القارات حول العالم. استخدمت في رسالتي منهجية بحث تشتمل على مقاربة كمية تؤدي إلى اختبار كل فرضية والوصول إلى نتيجة. حيث طورت نموذجًا سببيًا للتجارة والاستثمار لدولة الإمارات العربية المتحدة لتحليل السياسات وفقا لنظرية الجاذبية المعممة (GGT) قياسا على الدراسات والنظريات والمقالات الأكاديمية السابقة التي تمت مناقشتها في فصل المنهجيات والمتغيرات المستخدمة، حيث تشير النظريات الأكاديمية إلى أن تلك المنهجية تم استخدامها أيضًا واختبارها من قبل مؤلفي مقالات أكاديمية مختلفة في مجال تقييم محددات التجارة والاستثمار وكذلك مقالات أدوات الدبلوماسية الاقتصادية. ونتيجة لذلك، قمت بتطوير نموذجين جديين لزيادة كل من التجارة والاستثمار لاختبار كفاءة وفعالية كل متغير وهما أدوات الدبلوماسية الاقتصادية وسمات البلدان لتحديد تأثيرها على تدفق التجارة والاستثمار. تم استخدام كلا النموذجين لدراسة تأثير الثوابت الاقتصادية على متغير إجمالي التجارة والاستثمارات. تتم مناقشة نتائج وتوصيات الأطروحة بطريقة توفر لصانعي القرار المعلومات المطلوبة عند اتخاذ القرارات للتوقيع على اتفاقية ثنائية أو متعددة الأطراف، واتخاذ

قرار بشأن فتح سفارة أو قنصلية، وحتى القيام بتحليل المخاطر من قبل التجار والمستثمرين لتقييم جدوى القيام بالتجارة أو الاستثمارات في مناطق مختلفة من العالم. في الختام ومن خلال النتائج التي توصلت إليها في رسالتي هذه، تميل البلدان ذات الدخل المرتفع إلى زيادة تدفق التجارة والاستثمار مع دولة الإمارات، وقد أظهر معظمها تأثيراً إيجابياً لوجود السفارات والقنصليات والتوقيع على اتفاقات معها، وهذا تأكيد آخر لدور الدبلوماسية الاقتصادية في تعزيز التدفقات التجارية والاستثمارية، كما يضيف تحليلي عنصرا جديدا في تلك المناقشة، ألا وهو الحاجة إلى إنشاء سفارات أجنبية من هذه المناطق في دولة الإمارات العربية المتحدة عبر إقامة علاقات. سياسية تولد الثقة كعامل محفز مهم للتجارة والاستثمار.

مفاهيم البحث الرئيسية: السياسة الخارجية، البعثات الدبلوماسية، الملحقية التجارية، الدبلوماسية الاقتصادية، التعاون الدولي، المساعدات الخارجية، الاستثمار الخارجي المباشر، دولة الإمارات.

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Dedication

To my beloved country and its visionary leadership who guided and supported me throughout my life

To my beloved parents, wife, and family

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Chapter 1: Introduction

1.1 Overview

Economic Diplomacy is a political approach regarding how a country seeks to deal with other countries to maximise their national gains in a variety of areas. In doing so, the country seeks to obtain a comparative advantage against nations that do not use such tools or practices. Ruffini (2016) defined Economic Diplomacy as "*the method or processes by which a country takes advantage of cross-border economic activities to achieve its ultimate national interests*". In contrast, Naray (2008) used the term Commercial Diplomacy as " *the activities that are conducted by state's representatives with diplomatic status for the reason that the business promotion between a home and a host country aiming at encouraging bilateral trade and investment flows*".

Economic Diplomacy is not a new approach in foreign policy; it had been used many years ago for removing barriers that might withstand the flow of investment and trade, as well as support negotiations on exceptional deals. Despite the relatively long history of Economic Diplomacy, there remains a debate as regards its efficiency and effectiveness. It is, therefore, a relatively complicated process for a young developing country with large positive surpluses that are invested through national sovereign wealth funds. The criticism that has been made is that these sovereign funds are invested in obtaining the highest risk-adjusted returns. Saner and Yiu (2003) stressed on the urgent need to redefine diplomacy in a sense that governments provide national development assistance to foreign countries through their home enterprises, while also entering into assistance programs that lead to receiving back diplomatic or multinational status support in return.

At the same time, the UAE Vision 2021 (2010) seeks to carry out a significant transformation of the country in a short space to become a significant economic and trading nation. The transformation of the country is taking place at a time when there are increasing threats both political and economic. In the case of the latter, the primary earner of the economy namely hydrocarbons is challenged by new producers leading to a drastic fall in oil prices. In the case of the former, the UAE is in a highly volatile region and thus needs to ensure its national security. This includes not only its national borders but essential aspects, such as food and water which are extremely important in an arid region.

Therefore, bilateral relationships are entering a period where new tools are required. However, to the best of our knowledge, the uniqueness of this research shall provide positive contributions to the relevant literature that examines the role of Economic Diplomacy for the UAE and can support the country's new international path in policy making, strategies and initiatives. As a consequence, the dissertation shall add to the body of knowledge the effectiveness of Economic Diplomacy tools for a country such as the UAE which this research seeks to fill.

1.2 Problem Statement

The United Arab Emirates Foreign policy constitutes of various elements and pillars of which this dissertation examines some elements of the economic diplomacy pillar. The decision-making process to strike agreements and expand diplomatic missions relies on various factors. However, what this dissertation looks at is a few of the economic diplomacy means that may affect the overall bilateral trade and investment. Such an empirical approach that provides a sound and scientific methodology to assess

each economic diplomacy means and their effectiveness on the bilateral trade and flow of foreign direct investments is useful for the decision-making process.

1.3 Relevant Literature

1.3.1 Economic Diplomacy as Part of the Foreign Policy

Economic diplomacy is referred to as the method or processes by which states take advantage of cross-border economic activities to further their national interests (Ruffini, 2016). In doing so, nations seek to obtain a comparative advantage against nations that do not use such tools or practices. Ruffini (2016) states that Economic Diplomacy is also about making connections between the sphere of corporate players, who export or invest abroad, and the sphere of diplomats, who represent the state on the international scene and implement geopolitical decisions.

Diplomacy has been evolving, and so has its definition and understanding as well as the professional identity of the diplomats. Diplomacy is an old practice that dates back to the ancient Greek empire and has evolved significantly over the past periods. Significant contributions have been made by several civilisations particularly during the Italian city-states, the French before the French revolution, and in England starting with industrialisation and the expansion of the British Empire. Regular and significant contributions have been made by the United States of America especially after the second world war with the modern large scale social science research aiming at analysing, understanding and synthesising to better understand the behaviour of the international negotiators (Saner & Yiu, 2003).

Economic Diplomacy is not a new tool and has been used for many decades to eliminate investment and trade barriers and to negotiate special deals. Moons and van

Bergeijk (2016) argue that Economic Diplomacy is used primarily for the following reasons:

i] To open foreign markets so that trade can increase. Interestingly, initially, the focus of countries was to export; however more recently nations have realised that their companies need to be part of global value chains and hence two-way trade is essential. In many respects, the focus is to remove trade impediment and to ensure that lengthy trade facilitation procedures do not negatively impact latest production systems.

ii] To lobby on behalf of national firms to enter foreign markets or gain some competitive advantage. This may also include dealing with government-related outstanding or contractual obligations.

iii] To bring about multi-country systems such as the recent Trade Facilitation Agreement which ensures that all countries follow a single system. In part, this also implies negotiating international agreements and ensuring their compliance.

iv] Attracting inward investment. It may seem a little odd that countries such that are rich and highly developed seek inward investment. However, the reality is that inward investment brings with it many benefits such as new technology, linkages that support domestic small and medium-sized firms, and so on.

Okano-Heijmans (2010) argues that Economic Diplomacy is about economics as an instrument of international foreign policy to give the below definition:

i] Diplomacy concerned with economic policy questions.

ii] Diplomacy that employs economic resources, either as rewards or sanctions, in pursuit of a particular foreign policy objective.

Since economic tools can be used not only for foreign policy objectives but also for domestic political goals, Economic Diplomacy cannot be understood without consideration of the domestic domain. Indeed, in Economic Diplomacy, governments try to reconcile three types of tensions: between politics and economics; between international and domestic pressures; and between government and other actors (Woolcock, 2008). Lee (2010) argues that international developments whether they are economic or political are driven by diplomacy. Historically, this area of international relations was viewed within a context of state-driven issues or security. However, more recent academic research has taken a broader approach and examined the economic interests of a country to how diplomacy is carried out.

In part, the focus on economic matters has been forced on countries through the development of multinational institutions such as the World Bank, International Monetary Fund in the post second world war. These multinational institutions in the last sixty years have become extremely important organisations wielding considerable power and influence over a country. These multinational institutions are concerned with issues relating to intellectual property rights, e-commerce agreements, transnational finance negotiations, trade facilitation, climate change and more recently sustainable development goals. Therefore, a new form of diplomacy is required that goes beyond simply security concerns of a country and takes a more holistic approach.

In recent years, however, there have been many notable shifts in the study of diplomacy. As per Lee (2010), several scholars outlined the need to understand international relations outside the narrow state-centric security nexus. In light of this, the author focused on how contributors to this developing debate have moved the study

of diplomacy towards a better understanding of the processes and practices of Economic Diplomacy.

Several researchers have used analytical tools from various social-science sectors, in particular, International Political Economy (IPE) and Business Studies, to shed lights on the importance, and impact, of economic factors and economic needs to diplomatic practice and processes. Also, they developed new concepts of diplomacy – catalytic diplomacy, network diplomacy, and multi-stakeholder diplomacy – which created new tools to recognise the greater variety of state and non-state factors in diplomatic practice as well as to shed lights on the different and changing character of diplomatic processes. Diplomacy, in this view, is not limited to inter-state relations in the global and international system but also caters for the social, economic, cultural and political relations among networks of political factors in formal and informal domestic and systemic environments (Lee, 2010).

In broader terms, Lee (2010) argues that the study of diplomacy has shifted its focus from the diplomacy of economics in which the key theme was the economic tools of statecraft, to the study of Economic Diplomacy in which two themes are combined. The first theme is that of a diplomat as an agent in International Relations (IR) and IPE. The second is how to involve non-state and non-foreign ministry employees into diplomatic agents.

According to Ruffini (2016), countries usually use trade as well as other foreign economic relations in a soft manner in order to enhance its influence upon other states while drawing political gains on the international and global scene. It is not a simple practice to unravel the purely political and economic motives in commercial relations bilaterally. Therefore, Ruffini (2016)’s view is that when trade flow increases between

two countries from the corporate voluntary initiatives and projects, the political and official relations between them becomes even closer.

The bilateral trade relations usually lead to signing trade, intergovernmental and investment agreements that usually involve having political representation during the signing ceremony which could be at the level of heads of state. Therefore, the objective does not remain at the simple trade rationale but now becomes a political issue. This also brings upon further channels of cooperation that may involve technology transfer and cultural exchanges as well as boosting diplomatic relations to a whole new level. This at least causes one of the two countries to exercise some form of an influence on the other country.

For instance, the economic relations, nowadays, between China and several African countries are a good depiction that illustrates the strong commercial position acquired by China in Africa which China considers at the forefront of their economic Agenda. Since the year 2000, a ministerial conference name “The Forum of China-Africa Cooperation” has been held every three years, not to mention the historic visit of the Chinese President Xi Jinping to Tanzania, South Africa and The Republic of the Congo in his African tour in 2013 (Ruffini, 2016).

When looking at the regional level, foreign trade relations are seen to play a vital role at the political level. The importance can be drawn from the tools used such as the free trade agreements, the monetary unions as well as the customs unions. Many countries tend to favour such an arrangement. However, the level of integration is always a key success factor to any grouping. For example, a weaker arrangement could be seen in the regional agreements such as the free trade areas. For instance, the North American

Free Trade Agreement where the political ties are quite loose, the same is noticed in the European Free Trade Association (Ruffini, 2016).

However, stronger arrangements could be seen in the European Union which is the most advanced form of regional integration to date. The main driver for the European Union is the political will. In 2010, the Eurasian Customs Union (Armenia, Belarus, Kazakhstan and Russia) was another example of the use of economic drivers as a constituent of the stronger political block (Ruffini, 2016). As far as developmental aid and financial support is concerned, it has been evident that several countries have tied these activities to specific political goals. The negotiation that usually occurs prior to securing financial aid always involve political and economic goals.

As per Ruffini (2016), an OECD study claimed that foreign-aid-connected exports from nine European countries donors and thirty two developing countries only represented 4% of total exports. This provides a stronger indication that much larger weight is given to the political weight and interests as well as historical ties, current trade and culture relations and geopolitics. These factors constitute larger importance when deciding to provide financial assistance or ODA's.

Recently, Globalization has made the greater necessity for the use of Economic Diplomacy within the foreign policy of nations. The range of its use has significantly increased, and new subjects became active leading to stronger public awareness. Therefore, many developing and ex-communist countries became integrated within the world system in which multinational organisations played a more significant role in organising the trade and economic cooperation such as the World Trade Organization (WTO).

Moreover, Economic Diplomacy penetrated deeper in these countries and its local policies through several actors within and outside the governments. As a consequence, it has been noticed that government power and resources are increasingly shrinking while trying to do more for less. Governments have been searching for ways to improve their negotiation tactics and leverage as well as its decision-making processes. The reasons behind this are their desire towards compensating the loss of power, addressing the international issues to serve their national interests, and managing a global system that is accessible to all nations (Bayne & Woolcock, 2011). From this, Economic Diplomacy arose by taking into consideration these enablers:

i] Involving ministries.

ii] Bringing non-state actors.

iii] Greater Transparency.

iv] Using international institutions.

These enablers are mainly geared towards engaging into negotiations and discussions with large multinational organisations such as NGOs, the IMF, The World Bank and the WTO. Non-state actors are usually used to spread the pressure of the international organisations requirements by sharing the burden. Also, development and investment funds are also used as leverage towards achieving specific developmental goals that improve the competitiveness and ranking of the countries in the world competitiveness indices.

Bayne and Woolcock (2011) argue that greater transparency has been a critical success factor in the Economic Diplomacy new order, especially that modern NGO's and multinational organisations tend to require certain levels of transparency that enable more access to capital flows and investments. The OECD demands the highest levels

of transparency and monitors the implementation of transparency measures in the member countries as well as non-members who seek to participate in any of its sub-committees. The main advantage is that countries gain more attractiveness for the flow of trade and investments through their association with the OECD.

The use of international organizations and institutions became increasingly crucial to countries. As mentioned earlier, the shrinking power of nations is compensated through taking part or membership in international organisations where the power is regained collectively through the collective power of the member countries. The particular era in which international organisation started booming was throughout the 1990s where new organisations were formed while transforming the old ones especially in the fields of trade, investment, finance, governance and business environment (Woolcock, 2008).

For instance, the World Trade Organization (WTO) uses trade policy reviews regularly to revise and scrutinise the domestic policies of nations to ensure compliance with world trade facilitation standards as well as subsidisations policies and intellectual policies. The Group of 7 (G7) and the OECD are progressively demanding countries to include environmental measures into their domestic policies and procedures especially those related to climate change and biodiversity (Bayne & Woolcock, 2011).

However, nowadays multilateralism has been weakened by several crises. Mortimer (2018) argued that the failure of western politicians to protect the multilateral system might be because people take it for granted. The euphemistic “WTO option” of a no-deal Brexit is an example of the assumption that the rules-based international trading regime is a constant bedrock, even though Trump often seems bent on dismantling it.

Also, the European Union (EU) was always dependent on NATO; in fact, the EU was also established as a security organisation, while both organisations also work together. As Mortimer (2018) described it, the EU's objective was to install and maintain good political relations of the Jean Monnet's theory was that you become friends by doing things together, rather than you do things together because you are friends. The more things you do together, the better friends you become.

Member states are in a constant process of negotiation so that it becomes strategically important to quarrel as little as possible with your fellow members, because you never know when you will need their support. The disadvantage of multilateralism is that when you are not a member, it works against you. Furthermore, by leaving the EU the United Kingdom, which is comparatively liberal in trade matters, may trigger the EU towards protectionism. Consequently, the UK may find that the EU it has left is more difficult to negotiate with than it was while it still belonged.

In light of the weakening of the multilateral institutions, Mortimer (2018) argues that China is fast emerging as a high power with an elaborate and strategic master plan. Accordingly, China seems inclined to use parts of the existing multilateral system – including parts that constrain it, such as WTO dispute settlement, and the peer review process in the Financial Action Task Force, which works against money laundering. Meanwhile, China is creating new institutions such as the New Asian Infrastructure and Development Bank as an alternative to the World Bank and the Asian Development Bank. It has also established the One Belt and One Road Initiative as an initiative of its President Xi Jinping geared towards its international efforts to build economic cooperation.

Woolcock (2008) affirmed that a key constituent in Economic Diplomacy is the finance and financing for development. The new set of financial standards came to life under the Basel Committee for Banking Supervision as well as the Financial Stability Board. They produced a comprehensive set of rules and regulations not only for the banks and financial institutions internal governance but also on capital liquidity, leverage and cross-border operations.

As far as the tools of Economic Diplomacy are concerned, bargaining, dispute settlement and attractive deals are vital concepts that nations use to execute their strategies in trade, investment and economic cooperation. Trade and investment agreements are sometimes put on hold due to dispute or bargaining to strike other deals. For instance, the initial agreement between Canada and NAFO failed to materialise until another deal between Canada and the EU was reached and triggered the resolution of the Canada NAFO agreement overcoming Spain’s reluctance (Bayne & Woolcock, 2011).

In order to develop a comprehensive understanding of Economic Diplomacy, the tools that are deployed by nations to serve their foreign policy were examined. In most of the cases, the Economic Diplomacy is integrated into the broader foreign policy of the countries. Ministries of foreign affairs, trade, finance and economy are the critical executors of Economic Diplomacy blueprints (Seabrooke, 2011). In the political sphere, two terms are widely used to describe the process of diplomacy to enhance trade, investment and economic interests. Those two terms are Economic Diplomacy and Commercial Diplomacy.

According to Saner and Yiu (2003), Economic Diplomacy is mainly attributed to economic policy issues, for example, the work conducted by the nations' delegations

at standard-setting organisations such as the World Trade Organization (WTO) and the Bank for International Settlement (BIS). Economic diplomats are also mandated to monitor and report on the foreign countries economic policies in order to provide their capitals and home countries with recommendations on how to make use of them. Also, Economic Diplomacy uses resources with an economic nature such as rewards and sanctions in order to achieve a particular objective in their overall foreign policy.

As a tool for Economic Diplomacy, some countries also seek to support other nation's economic development by offering their enterprises and non-state entities services to foreign governments. These services take many forms such as expert advice, legal assistance, export incentives, and backstopping if required. This practice also entails helping their national enterprises to expand their markets and establish existence through subsidiaries and representative offices in other regional and international markets. Also, the provided services could also be extended to foreign non-state enterprises in the form of assisting them in investing and marketing activities to grow their businesses (Saner & Yiu, 2003).

Alternatively, the term Commercial Diplomacy is also used. Saner and Yiu (2003) described the term as providing support through the diplomatic missions to the home country's business and financial sectors in their pursuit of economic success and eventually achieving the national objectives of economic development. Commercial Diplomacy entails promoting inward and outward investments and trade. The crucial constituents of the commercial, diplomatic activities are the supply of timely and accurate information about the export opportunities for the home country's enterprises as well as investment opportunities, in addition to taking specific measures to organise and assist trade missions from their home countries to the host countries. Another level

of commercial diplomacy is also being able as diplomats to provide accurate advice and support to the national enterprises in taking the investment decision throughout the due diligence process.

Towards this end, Commercial Diplomats are usually placed abroad to undertake business facilitation activities in the fields of trade, investment, tourism, country image, and promotion of science and technology. A commercial diplomat may take various forms such as trade representative, trade commissioner, commercial attaché, and trade attaché (Naray, 2008).

Naray (2008) identified various types of distinguishable arrangements that serve as a basis to identify different organisational arrangements. The different organisational configurations are outlines as follows:

i] *Arrangement 1: Trade promotion part of trade policy (M*inistry of Trade) - China's foreign affairs ministry is not directly involved in Economic Diplomacy. However, its embassies keep close coordination with the commercial service of the trade ministry. In the United States, the Department of Commerce is the exclusive entity to deal with Economic Diplomacy and business support. However, the commercial service provided in its embassies are under the direct authority of the ambassador and thus the Department of State.

ii] *Arrangement 2 & 3*: This Arrangement is a combination of foreign affairs and trade with Australia, Canada and New Zealand tend to distinct trade policy from trade promotion activity. Except, Scandinavian countries, which include the promotions activity; however, all of these countries combine foreign affairs with trade in a single ministerial entity and maintain separation from its

diplomatic service, although the heads of their missions would be responsible for both activities.

iii] *Arrangement 4: Coordination mechanism*- In this arrangement, is an example in the UK Trade and Investment (UKTI) which reports to both the Foreign Office and the Department of Trade and Industry? The UKTI organisational structure is centralized, and career diplomats undertake the UK Economic Diplomacy. Most of the UK's diplomatic resources are committed to trade and commercial activities, not to mention that 75% of the staff are recruited from within the target markets (Naray, 2008). Singapore also has a similar arrangement in which the Economic Diplomacy is carried by a trade promotion agency which has a joint oversight by the Foreign Affairs and Trade Ministries. Also, Rana (2000) outlines the term "part unification" matrix between both ministries in which two specialised units are formed within the Foreign Office to oversee trade and investment activities, but through a unified diplomatic function.

iv] *Arrangement 5: Trade promotion in MFA*: Large and medium-sized developing countries are mostly using this arrangement. The arrangement entails having the Ministry of Foreign Affairs carry out Economic Diplomacy from within the ministry and through its embassies. The separation of the foreign affairs and trade affairs creates this un-harmonised arrangement (Naray, 2008). Rana (2000) argues that such an arrangement increases the weights of the organisation and thus makes it difficult to undergo reforms.

v] *Arrangement 6: Independent trade promotion structures*- This arrangement entails having an independent Trade Promotion Office that operates without any hierarchical subordination to the Embassy. The Embassy only deals with

> political issues. Countries like Germany adopt this model as their Economic Diplomacy is delegated to the network of the bi-national chamber of commerce. Also, Japan has JETRO, South Korea has (KOTRA), and Italy has ICE, whom all practice Economic Diplomacy independently from the foreign affairs embassies.

In Portugal, it is noticed that a similar arrangement in having ICEP as an entity tasked to conduct Economic Diplomacy activities. The trade attaché is usually nominated by the Foreign Affairs Ministry and has a dual mandate as a diplomatic member of the embassy as well as the director of the trade promotion office (ICEP branch) in the target market (de La Carrière, 1998). Okano-Heijmans (2010) examined the tools Japan used in its relations with North Korea especially from the perspective of Economic Diplomacy. The four policy areas/tools as outlined by the author are:

Negotiations on normalisation and single-issue politics;

i] Bilateral Trade and investment.

ii] Sanctions and humanitarian aid.

iii] Multilateral and regional diplomacy.

These tools match the four long-term objectives stated in the Pyongyang Declaration. Taken together, the authors demonstrate that Tokyo's in-action stretched from the 'business end' to 'power-play end' (and in between) making for a sophisticated negative Economic Diplomacy (Okano-Heijmans, 2010). As per Okano-Heijmans (2010), Japan Economic Diplomacy is exercised through the indirect promise, provision, withholding and sanctioning of economic benefits, and is largely practised in the bilateral and multilateral context. National policies such as the tightening or easing of indirect help for Pyongyang by supporters of North Korea in Japan (mainly

financial flows) support Japan's Economic Diplomacy. As trade relations between Japan and North Korea are virtually non-existent at present.

1.3.2 The Global Perspectives of Economic Diplomacy

Today's Chinese Economic Diplomacy is seen as part of realising the "Chinese Dream" put forward by President Xi Jinping to realise the "great rejuvenation of the Chinese nation (Fuchs, 2016). China is currently assuming the second largest economy to be a key member in the Group of Twenty "G20". The Chinese leadership continue to put forward plans of transformation in order to become an active trade and economic power in the world. For such a reason, I added China in this section due to its strategic importance as an economic power in the world, along with its extensive use of economic diplomacy tools that are seen in Africa, Far East and South America.

Heath (2016) argue that the Chinese have directed reforms to deepen Asia's integration as a regional economy, modify international trade rules and standards, and secure needed technology, resources, and markets to improve China's competitiveness. China's main goal is to intensify its ongoing competition with the United States and increase its market exposure to the global economy. Concerned about its vulnerability in the face of these realities, China has begun to view requirements for economic growth in terms of national security. The net effect of these changes has been a weakening of the role that trade, and investment ties have long played in restraining political and security tensions in U.S.-China relations. The bilateral relationship thus appears to be entering an era in which intense strategic competition coexists with deep economic interdependence.

President Xi Jinping strategy included several key strategic large-scale initiatives that increased the Chinese influence in Asia and the world. In 2013, President Xi Jinping announced the establishment of the Asian Infrastructure and Development Bank (AIIB). Following that in 2014, China announced the One-Belt One-Road (OBOR) initiative to revive the silk road trading corridors from the east to the west and vice versa. During the same year, the BRICS announced the establishment of the new Development Bank, and the Chinese, promoted Free Trade Area of the Asia-Pacific (FTAAP) during the Asia-Pacific Economic Cooperation-*APEC* (Heath, 2016).

China has also taken several leaps towards the internationalisation of the Renminbi. The Asian Development bank concluded in 2014 that Beijing had progressed in promoting RMB settlements for a trade involving China and in issuing RMB-denominated bonds in Hong Kong, but that the level of internationalization remains limited due to capital account controls. (Eichengreen, 2014). In August 2015, China sought larger market share through a sharp devaluation of the RMB. The US and other industrial countries rose suspicions over this action stating that China used this as an excuse to gain larger market share through lower price of exports. Several commentators described this action as the initiation of "trade war" between industrial countries over the global export market. (Eavis, 2015)

Although China's has been actively seeking to apply economic diplomacy tools in its foreign policy, it has been argued that it remains an active Chinese focus on its surroundings security. Erickson and Liff (2016) discussed the active assertion of its claim to the Senkaku/Diaoyu Islands that led to increasingly crowded surrounding waters and airspace with the Chinese military and paramilitary forces, signalling the risk of a Sino-Japanese crisis has reached unprecedented heights. They assessed the

extent to which institutional reforms since the 2001 US-China EP-3 crisis have enhanced longstanding weaknesses in China's crisis management capabilities and its ability to communicate via hotlines with Japan. Therefore, the establishment of a Central National Security Commission (CNSC) and other recent reforms have been considered as achieving modest improvements in the Chinese reform efforts.

Towards this end, Heilmann and Stepan (2016) described that China's leadership styles are essential to achieve the goals and objective of China in the international economic agenda. They argue that rebalancing the economy while maintaining steady growth – is more important than strengthening the party in the short run, and also more difficult. Xi Jinping Xi could make decisions and force them through the bureaucratic and party apparatus, but he lacks any feel for a vast, complicated and globally-integrated economy. There are no easy victories in economic policy, nor guaranteed outcomes. Accordingly, the rebalancing of the Chinese economy is an ongoing effort but remains not guaranteed fully.

Breaking China's iron triangle, of the Chinese Communist Party (CCP), state-owned companies and provincial, city and local governments is the most critical element in materialising the growth potential of its economy. The Chinese economy which still allows a substantial role for the state could enhance its credibility in the world as an alternative to the United States of America. The dynamics of Chinese politics have changed since the installation of the new party and state leadership under Xi Jinping in 2012 and 2013. Decision-making power has shifted to the newly formed central party organs (Heilmann & Stepan, 2016).

Although China may seem demographically different than the UAE, the Economic Diplomacy tools and effects could be of a certain similarity to the case of the UAE. At

a macro scale and within its influential regional position, the UAE could look at some of the steps China has taken and applied them in a manner that is suitable to the magnitude and constituency of its economic status either internally, regionally or internationally. The literature on China demonstrates that there might be an opportunity for the UAE to exploit within the Chinese initiatives through embedding various economic ties with them and hence, excel towards the optimum outcome sought to enhance the UAE's economic status globally.

The political, trade and economic relations are very much tied on various facets. In 1989, Brian Pollins developed a public choice model of bilateral trade flow. He argues that the decision to import goods or services is primarily determined by the place of origin of the providers and taking into consideration the political climate between the trading partners (Pollins, 1989b). He also argued that importers are very much concerned with the political risks and trade disruptions that arise from conflicts, thus rewarding political friends and punishing foes (Pollins, 1989a).

Fuchs (2016) applied the political-trade nexus effects on bilateral economic relations. As China frequently applies pressure on governments not to receive the Dalai Lama, he empirically evaluated the effect of visits on the receiving countries through looking at the China-imposed sanctions using a probability model econometric test. He concluded that the likelihood of a Chinese leadership visiting a country is 13.6% lower if that country received the Dalai Lama in a given year; however, the odds of a Chinese leadership visiting the same country improve the following year as the political tensions begin to ease off. All in all, these findings are evidence in favour of Economic Diplomacy being a vital determinant of the bilateral political climate and economic exchange among nations.

Okano-Heijmans (2010) argues that although there are substantial gains from the multilateral forums such as the WTO for trade liberalisation, the speedy spikes in North-South bilateral and mini-lateral Free Trade Agreements since the late 90s brings a systematic explanation towards the prioritisation of various mediums of Economic Diplomacy over the others. While motivating developing countries to pursue preferential trading links with modern industrialised nations have been widely considered especially to consolidate market access, obtain exemptions from contingent protection, attract foreign direct investments, and enhance policy reforms, Okano-Heijmans (2010) offered a new rationale through linking positive political economy approaches to rational institutional design in a way explaining why industrialized democratic states seek their trade and economic objectives in non-multilateral forums which the authors called "The Gain-Control Trade-off".

For instance, in a multilateral setting where almost universal membership exists, the maximisation of gains from trade and investment and the reduction in transactional costs are offered. However, a single country should not expect to have adequate control over its trading partners or having a liberalisation agenda the level of a multilateral organisation set. In contrast, when having a bilateral free trade agreement, a country may yield negligible amounts of gains from trade and investment in addition to a substantial increase in transactional costs due to the existence if idiosyncratic sets of rules and regulations. At the same time, a vast country can acquire a higher level of control in terms of ability to choose its partners, deal with its issues, and determine its agenda, while having sound exclusion and inclusion criteria that is based on domestic political interests. Therefore, Okano-Heijmans (2010) contend that industrialised democratic countries face a trade-off between seeking maximisation of aggregate

economic gains in the interest of the national welfare or seeking control over the rules in line with political interests (Okano-Heijmans, 2010).

Despite the widespread usage of Economic Diplomacy, it has not gone un-criticised. Sceptics argue that companies are profit motivated and do not need any form of government support. The counterargument is that widespread usage of Economic Diplomacy implies that it serves a beneficial role to support the corporate sector. This view is supported by the fact that cultural factors impact corporate activities and hence necessitate the intervention of the state either as a partner or lobbyist. Second, new financing of large-scale projects, such as public-private partnerships, implies that the state becomes a partner. This also implies that the state needs to support its corporate sector in securing and safeguarding the interests of the corporate sector. With greater corporate to stat, dealings imply that information flows and signals to the private sector are essential. From an inward investment attraction viewpoint, the state can offer incentives and guarantees that can induce foreign capital.

Moreover, Cotula (2016) argues that governments rarely considered arbitration risks at the negotiation stage, and that awareness of these risks remained low after the treaties were signed. In most of the case studies considered, it is only after the government was taken to arbitration that awareness about investment treaties increased and that policies started to shift—whether incrementally (e.g., through recalibrating treaty texts), or radically (e.g., through terminating investment treaties). Ponsatí (2004) proposed a simple model to explore the effects of positive economic intervention by stakeholders in the resolution of bilateral conflicts. The author has proved that while unilateral promises offering transfers after the contenders agree may sometimes help,

they are not always advisable. In contrast, active participation in a multilateral negotiation may easily yield outcomes that benefit the stakeholder.

The results fundamentally rely on the very crude nature of the bilateral conflict that has been postulated, a war of attrition, and on the constraints imposed by the game protocol. Manzini and Ponsati (2006) explore the role of stakeholders in bargaining games where a bilateral agreement can be any division of the surplus. Therefore, the willingness of stakeholders to make contributions to promote agreement may backfire: instead of accelerating agreement the stakeholder's intervention might be the source of additional inefficiency. Relaxing the assumption that stakeholders gain only from the agreement, allowing stakeholders that suffer negative externalities upon agreement (think, for example, of weapon suppliers) is an extension for future research (Ponsatí, 2004).

The Association of Southeast Asian Nations (ASEAN) is composed of 10 nations that have made significant steps towards having stronger economic ties and intergovernmental cooperation. One of the key enablers that the ASEAN created was the regional trade agreement (RTA) signed in 1992. Selmier and Oh (2013) analysed Economic Diplomacy outcomes before and after the RTA. The results indicated that ASEAN members were able to engage with more robust trading partners. Also, the pecking order between influential countries and ASEAN members have statistically been lower. Post-1992, the imports from powerful nations showed lesser amounts while more exports were noticed compared to the period before the RTA in 1992.

Employing ASEAN's diplomatic relations and economic integration over the period 1980–2001, Oh and Selmier Ii (2008) examined how diplomacy influences intra-ASEAN trade and trade between ASEAN member and non-member countries. The

authors argue that ASEAN indeed follows GATT's Article 24: the purpose of a free trade area that should have to enable seamless trade between the constituent territories without raising barriers against other contracting parties. Instead, ASEAN proactively employs diplomatic relations to increase imports by 1.2 times from non-members, while ASEAN membership increases intra-RTA imports by 2.2 times. This supports the authors' argument that RTAs like ASEAN not only increase regional economic interdependency through institutional agreements but also increase trade with non-member countries through a process of Economic Diplomacy. Oh and Selmier Ii (2008) found that RTAs augment globalisation processes in ways not often considered: regionalisation is not a substitute for but rather a complement to globalisation.

1.3.3 The Perspective of the UAE Foreign Policy and its Economic Statecraft

In recent years, significant importance has been placed by researchers to the fundamental transformation in the foreign policy of the UAE. From being merely regionally focused, the UAE has become increasingly global in its outlook. A vital part of this significant change in its international engagement has been the growing use of foreign direct investment and trade to achieve key foreign policy and security goals (Bartlett, Ker-Lindsay, Alexander, & Prelec, 2017).

For the UAE trade and inward investment are undoubtedly important, and to date, there have mostly been a 'hands-off' approach whereby the private sector has been allowed to deal with issues without government involvement. The rationale behind this is quite simple in that with a major part of the UAE Federal Government and local government especially Abu Dhabi's revenue is being generated from the hydrocarbon sector, the focus has been to ensure its development as well as diversification away from the oil and gas sector. Since four decades ago, the UAE became highly diversified to relieve

from hydrocarbon dependence, which would be accounted for 30% of the GDP by 2021 onwards (Vision 2021, 2010). The vision of the country foresees hydrocarbons playing a marginal role. In fact, in some emirates such as Dubai hydrocarbons account for only 4% of GDP.

With a diversified corporate sector there becomes a greater need for Economic Diplomacy. In the case of the UAE with its surplus funds, Economic Diplomacy also includes its ability to invest overseas through sovereign wealth funds or state-owned enterprises. To date, these funds have been invested in obtaining the highest risk-adjusted return rather than any political advantage. Similar to the case of the UAE, Cotula (2016) examined the hypothesis that low- and middle-income country governments concluded investment treaties in 'boundedly rational' ways—that is, based on incomplete information and analysis. The central argument is that governments overestimated the benefits of investment treaties, taking at face value claims that the treaties would promote foreign investment; and that they underestimated the costs by not fully considering the risk of investor-state arbitration until investor claims hit them directly.

In general, small states have been considered reasonably limited in terms of influence and the ability to project power in the international arena (Cooper & Shaw, 2009). However, in the case of the UAE, it has demonstrated that small states have acquired an increasing soft power that allowed it to thrive and overcome the challenges in an interconnected world (Ulrichsen, 2012). Several factors have facilitated this. First, oil and gas have placed the UAE as the second largest economy in the Arab World. The primary rationale for this surge is the income generated by energy – from the largest and most resource-abundant Emirate, Abu Dhabi – has been of utmost importance.

Second, the UAE has also gained leverage from the decline of traditional regional powers, such as Egypt, Iraq, Iran and Syria, which has seen a resulting rise in both the affluence and influence of the countries of the Gulf Cooperation Council (Bartlett et al., 2017). The vacuum created by the regional turmoil enabled the UAE to step in as a regional influencer and durable economic power. Third, the UAE has benefited from an advantageous geographic position in the Middle East bridging the West, East and South. In addition to its proximity to many of the world's emerging markets, it has established a reputation as a politically-stable and investor-friendly state in an otherwise volatile and unstable region (Ulrichsen, 2012).

The UAE's Economy is at the service of its foreign policy and the economic resources expanded abroad in the forms of foreign aid or investments are meant to generate returns that serve the country and its vision (Young, 2017a). Besides, Young (2017a) projects the UAE's sophistication in the statecraft is emboldened and strengthened by careful ties between companies, bilateral partners and the country itself. The diversification targets and objectives set in the Vision 2021 (2010) has indeed started a long time back since the year 2000. The primary industry that the UAE had focused more to achieve the diversification is the logistics and transport sector. (Almezaini, 2012).

Henderson (2017) examined the UAE's state-owned enterprises (SOE's) in the transport and logistics sector and their role in the state foreign policy. The transport and logistics sector in the UAE has seen signification evolution in the past years especially with the significance of the investments witnessed abroad in the same sector. To that end, Molavi (2014) described the UAE as being a nexus state for trade on the Southern Silk Road linking Asia with the Americas, Europe and Africa and

vise-versa. The increase in sophistication has departed the UAE from the "city-state" described by Bassens, Derudder, and Witlox (2010) - in which Dubai is the commercial hub and Abu Dhabi is the oil-rich capital – to the nexus state initially described by Molavi (2014) and followed by Henderson (2017).

The evolution of the UAE's nexus state was first witnessed in Dubai, which invested heavily in infrastructure since the past 50 years onwards. Its state of the art seaports and airports resulted in the establishment of a services sector in its economy. Since then, other emirates began to invest in logistics and travel, and starting from the year 2000, Abu Dhabi made its move to create the emirate's national carrier Etihad Airways, as well as other facilities. Also, although Sharjah's airport is the very first airport in the UAE, it relatively recently launched Air Arabia in 2003 (Henderson, 2017).

Towards this end, the fundamentally global nature of the nexus state is a result of the size of the UAE's airline and logistics SOEs. Two state-owned Emirati carriers, Emirates and Etihad are considered to be "super-connectors", this is primarily because of their international routes that connect in the UAE (Economist, 2015). In addition to Emirates and Etihad, Air Arabia and Fly Dubai which are considered low-cost airlines also operate routes across the region. While in the logistics sector, Dubai Ports World also plays a role in routing cargo traffic through Dubai (Henderson, 2017). The company is the operator of Jebel Ali, and it is one of Dubai's largest SOEs with a portfolio of more than 77 marine terminals across the six continents with its core business being in container handling operations which generates approximately 80% of revenues.

DP World generates more than 75% of its throughput in faster-growing markets and 70% of its volumes in higher margin origin and destination cargo. The DP World has an average concession life of approximately 40 years in its investments abroad (DPWorld, 2016). The above progressions were mainly driven by the need to maintain a nexus state and the external SOE's that it depends on. While the competition is ongoing amongst the Emirates, synergies have been identified recently based on ensuring "a resilient and prosperous state even in the times of low oil prices" (Davidson, 2007).

Given that the transport and logistics sectors were of great importance in the state endeavour towards diversification, an interview conducted by Henderson (2017) established the relationship between this sector and the UAE's Foreign Policy. While this relationship depends on the type of market that the logistics or transport SOE is operating in, these SOEs have learned from experience that in more developing countries they can operate with minimal support from the country and their economic power is an effective form of diplomacy.

In more developed markets SOE investment is considered to rely on the groundwork of the foreign ministry in order to be successful. Back to the interview and according to the Dubai government official: "*In the developing world it is the case of the commercial interest going first. In the Western world, we have learned that if there is nothing political on the ground, there is the risk of a backlash, as happened with DP World. In these markets, the state needs to be there in order to undertake due diligence and lobbying*" (Henderson, 2017).

In another interview, Henderson (2017) described the role of SOE's in raising the profile of the UAE in western countries through building consumer confidence via

sponsorship agreements. For instance, the two national carriers the Emirates and Etihad are running Emirates Stadium and Etihad Stadium, respectively, aiming at developing the UAE's brand globally. An official from the Dubai Government stated that "*There is an element of this which has been about building trust in the UAE. Emirates and Etihad were partly a strategic development. The rulers wanted to build confidence, so they built best-in-class airlines*". The diplomatic power of SOE's also arises from their significant purchasing power and influence they can exert on the key market players in the west.

In addition to the above, the UAE has also been a key influencer with its economic diplomacy tools related to aid and outward foreign direct investments. The case of the UAE's interest in the Balkans since 1999 has witnessed significant cyclical nature over the past two decades (Bartlett et al., 2017). In 1999, the UAE provided significant foreign assistance to the Kosovo crisis to facilitate post-conflict reconstruction. The flow of official development assistance took the forms of grants and concessional loans amounting to $61 million from 2009-2013, while Abu Dhabi Fund for Development (ADFD) provided €36.7 million concessionary loans to Albania for the construction of the Tirana-Elbasan road project as well as funding Sheikh Zayed Airport in Kukes with an amount of €16 million. The UAE is also the 2nd largest non-EU, preceded by the USA, donor to the former Yugoslav Republic of Macedonia (Bartlett et al., 2017).

The most apparent expansion in commercial investments by the UAE in the Balkans was witnessed in Serbia. Even though Serbia may not have been at the forefront of aid, UAE investments have increased rapidly in the country and focused on four specific areas, namely aviation, urban construction, military technology and agriculture (Bartlett et al., 2017).

On the aviation front, Etihad Airways has been busy investing in foreign airlines to expand its strategic partners and network of destinations by leveraging the access points and fifth freedom enjoyed by these airlines in their respective countries. By 2014, the Etihad Group had acquired minority equity stakes in Air Seychelles, Air Berlin, Virgin Australia, Aer Lingus, Jet Airways, Alitalia and Darwin Airline. The strategy has been to create a global network of connecting flights, with Abu Dhabi International Airport as the hub. The airline has now become one of a small group of "super connector" airlines that are making significant competitive inroads into the traditional national carriers (Economist, 2015).

Focusing on Serbia, in August 2013, Etihad acquired a 49% share in the Serbian national carrier JAT. Etihad restructured the airline through its 5-year management contract and provided it with the new name of "Air Serbia". The success of this investment was realised in 2014 when Air Serbia recorded a net profit of €2.7 million with revenues of €262 million, (an increase of 87% year-on-year) and carried 2.3 million passengers with an increase of 68% year on year. This turned Belgrade Airport into one of the fastest growing airports in Europe with passenger numbers growing by 34% in 2014. The success of Air Serbia continued into 2015 with revenues in both passenger and cargo divisions increasing rapidly (Bartlett et al., 2017).

On the military technology front, The UAE recognised the potential of the well-developed and sophisticated arms industry in Serbia which is a key constituent of its Economy. In October 2013, Mubadala Development Company signed an agreement with the Serbian government to identify areas for investment in aerospace manufacturing, telecoms, renewable energy and Semiconductors (Arnold, 2013). Numerous meetings have since taken place to develop defence cooperation between

the two countries which resulted in a Defence Cooperation Agreement being signed in April 2014 to exchange information and technologies in the defence industry. The agreement encompassed training of UAE personnel including military police and Special Forces in the military academy in Serbia and developing mid-range mortar systems (Malik, 2014).

An additional outcome of the agreement is the announcement to establish a strategic partnership and sign another agreement on joint development and acquisition between Yugoimport SDPR and Emirates Advanced Research & Technology Holding LLC (EARTH). This collaboration resulted in the joint development of the Advanced Light Attack System (ALAS), which is a land-based anti-ship cruise missile, under a €200 million contract paving the way for more collaborative work in the field of defence industry between the two countries. Serbia has also signed several MoUs with several UAE-based companies for the production of semiconductors and aircraft components (Bartlett et al., 2017).

On the agriculture sector, the UAE through Al Dhahra Agricultural Company and Serbia has witnessed significant investments through joint venturing with the Serbian companies to develop a 9000 hectare of farmland in the northern province of Vojvodina to produce a range of crops, meat, and dairy products. The US$400 million deal - which was signed in March 2013 by the Crown Prince of Abu Dhabi, Shaikh Mohammed bin Zayed Al Nahyan, and the Serbian Prime Minister Aleksandar Vučić – and entailed Al Dhahra purchasing eight state-owned agricultural companies and invested in several other agricultural ventures.

The Abu Dhabi Fund for Development (ADFD) also provided a matching loan of US$400 million to the Serbian Government for agricultural development. Looking

ahead, the ADFD plans to invest in food production in Serbia and has signed an agreement with the Government of Serbia aiming at developing irrigation systems, machinery and agricultural infrastructure. In exchange, the Serbian Government guarantees food exports to the UAE as part of the food security initiative of the UAE (Bartlett et al., 2017).

Last but not least, in the real estate sector, there have been several significant UAE investments in Serbia aiming at diversifying its investment portfolio in the Balkans. In January 2013, Arabtec Holding announced it would open a regional headquarters in Belgrade, the capital of Serbia, to drive its expansion into the Balkans. Aabar is a sovereign wealth fund established as a private joint stock company. It is wholly owned by the International Petroleum Investment Company, which is in turn wholly owned by the Government of Abu Dhabi. Aabar's mandate is to invest in sectors with significant growth potential that fulfil the investment strategy of the government.

However, the most critical development was the decision by the Abu Dhabi development company Eagle Hills to invest up to €3 billion in Serbia to build Belgrade Waterfront which is a business, residential and commercial area along the rundown riverfront of Belgrade. Eagle Hills signed the contract with the Serbian government to redevelop the 1.8 million square meters site on 26 April 2015. The project includes a 140,000 square meter shopping mall that will be the largest in the Balkans; 5,700 homes to accommodate 14,000 people, eight hotels comprising a total of 2,200 rooms and a 200-metre high tower. A contract has been signed with Starwood Hotels and Resorts to run one of the hotels, the first W Hotel in South East Europe50.

Construction is planned for over thirty years, with at least half to be completed within twenty years. Eagle Hills owns 68% of the project, and the Serbian government owns

the remaining 32%. The terms of the contract state that the Serbian government grants Eagle Hills a 99-year lease on the land for the regeneration scheme and in return, Eagle hills to provide €150 million of cash investment and €150 million as a shareholder loan. The company will also lend the Serbian government another €130 million to buy packages of land in the development area which it does not already own and to clean up the area. The project is stated to generate around 2000 jobs in Serbia (Bartlett et al., 2017).

The evolution of the UAE's economy from a rentier state and an energy-based economy has witnessed tremendous achievements over the past few years. Abu Dhabi and Dubai had versatile development strategies which reflected their different oil endowments (Nyarko, 2010). The evolution and transformation were towards the goal of diversification away from oil. The fluctuation in oil prices is aimed to affect the gross domestic product no longer and thus the economy of the UAE. However as Shayah (2015) discussed, these efforts should not come at the expense of stability. In other words, inflation, fiscal balance and other economic levels should be maintained.

Through looking at the models adopted by both Dubai and Abu Dhabi, the modus operandi to materialise the objectives and plans of diversification are slightly different but fit for purpose given the nature of these both Emirates. In the case of Abu Dhabi, Nyarko (2010) argues that oil explains much of its economy making up to 90% of the total oil produced in the United Arab Emirates. He also discussed the Emirates efforts to invest abroad through its vast sovereign wealth funds namely Abu Dhabi Investment Authority (ADIA) that is estimated to be valued at $700-900 billion and Mubadala Investment Company estimated to be valued at $10 billion. There have been established due to the large surplus of the balance of payments throughout the years

which have been pumped into these funds in an attempt to diversify the sources of income of the Abu Dhabi Emirate.

Shayah (2015) discussed that according to the Central Bank of the UAE, the trade account surplus increased from AED 153.6 billion in 2009 to AED 179.9 billion in 2010 to reach AED 292 billion in 2011. Both ADIA and Mubadala have been engaged in several endeavours in order to establish cash flow away from the proceedings of the Oil and Gas sector in Abu Dhabi. Those investments were mainly outside the UAE through partnerships with Multinational Companies such as General Electric, Telecommunications companies in Nigeria, Alumina Bauxite in Guinea Conakry and renewable energy projects through Masdar (Abu Dhabi Future Energy Company) in various developing countries (Nyarko, 2010).

Though looking at Dubai's strategy, the difference is mainly due to the lesser oil production capacity of the Emirates which is estimates at 240,000 barrels a day. According to Shayah (2015) and Hvidt (2009), the "Dubai Model" of economic development are the following: i) government-led development, ii) fast decision making 'fast-track' development, iii) a flexible labour force through importing expatriates, iv) by passing industrialization and creating a service economy, v) internationalising service provisions, vi) creating investment opportunities, vii) supply-generated demand, viii) market positioning via branding, and xiv) development in cooperation with international partners.

Nyarko (2010) argues that the reasons for Dubai being unique are attributed to its business, finance and tourism facilities and its sheer gutsiness. With its free trade zones and the Jebel Ali port, Dubai is destined to becoming the major trade hub of the Middle East Region; a strategy referred to by some as the 'Singapore model'. Tourism has

also been a prime focus in Dubai, by planning to attract 15 million visitors a year (5.8 million in 2007) and offering tourists some of the biggest, most lavish shopping malls in the world, in addition to other activities geared to visitors to discover the essence of Arabian dunes and traditional sports. A critical year was 1985 when Emirates Airlines was inaugurated and is now fast becoming one of the largest airlines in the world.

Dubai's economic strategy is simple, clear and pragmatic, and is, indeed, being mirrored by other countries in the region and the world. Through recognising very early that oil would eventually be depleted, Dubai focused on becoming the trade and tourist destination of the Middle East. With its significant investments in infrastructure, Dubai also developed a business-friendly environment to attract many foreign companies to invest and establish regional headquarters in it through providing various business incentives that ensured ease of doing business at its highest possible.

In an overall discussion of the UAE transformation and evolution as well as its neighbours in the Gulf Cooperation Council. Nyarko (2010) argued that the United Arab Emirates has been prosperous in attracting western knowledge and expertise for its economic transformation. Although it has a small population, it has made up for this shortage through importing a considerable number of unskilled labours, mainly from the Asian subcontinent. While also attracting high-income expatriates from Asia, Europe and North America. The ability of the UAE to tolerate such an influx of foreign labour is a crucial building block for explaining its development and transformation through having flexible yet stable immigration and labour policy.

On the Gulf Cooperation Council (GCC) and Arab Countries front, Shkvarya and Frolova (2017) argue that the proximity of challenges in the social and economic

development of Arab countries provide a basis for the formulation of several practical considerations and measures for creation of the more stable economic structure. These considerations include the diversification of budget revenues sources through industrialisation; hastening the development of solid minerals and the formation of new industries; enhancing electricity and water desalination capacity; the focus of the concept of privatisation of state assets; revision of the social incentives targeting their national populations. Shkvarya and Frolova (2017) also argue that through implementing these measures, those countries will be more destined to attract foreign capital and develop the manufacturing and service sectors, especially tourism.

Towards this end, Forstenlechner and Rutledge (2010) also argue that the Gulf states need to update the social contract and discussed the saturation in the public sector in terms of employment. Therefore, the public sector can no longer act as an employer of first and last resort. They call upon governments of the Gulf States to enhance educational attainment, diversify the economy and intervene in the labour market directly. Forstenlechner and Rutledge (2010) also argue that the schemes in Kuwait and the UAE "subsidising" nationals by topping up their private-sector salary or paying an above-market rate in a state-owned "private" company is only one way of looking at the new social contract required in the Gulf States. Thus, the states should differentiate between classic public-sector and highly skilled public- and quasi-private-sector jobs, especially in the emerging high-skilled and high-tech industries.

All in all, Forstenlechner and Rutledge (2010) argued that as long as salaries offered by the "classic" public sector are several factors higher than those elsewhere, it will be such jobs that continue to attract nationals and have the most pride and prestige attached to them. Thus, if the social contract is not updated to reflect contemporary

demographic and labour-market realities, the Gulf States will eventually witness an increasing number of unemployment especially with a saturated public sector and an increasing number of people who might not have the right connection to secure the classic jobs. Similarly, Yousef (2004) also argued that the unemployment rate in the Middle East has been growing since the 1990s and has been averaging to 15% only second to Sub-Saharan Africa. He also discussed the vital role that the private sector plays in closing the gap in unemployment.

Yousef (2004) also describes the social contract in the Middle East as outdated and requires an update especially that it has been outdated due to its creating during the colonial construction of republican institutions throughout the Middle East which led to the emergence of interventionist-redistributive social contracts across the region. He also argues that the economic difficulties of the Middle East region in the past two decades have called into question the status of the region's post-war social contract, especially among those too young to remember the earlier era of rapid economic growth. Therefore, to move the reform process beyond its current limits, governments will need to revive national conversations about redefining the terms of the social contract.

1.3.4 Foreign Aid as a Tool of Economic Diplomacy

Although Foreign Aid is discussed narratively in this section as an economic diplomacy tool, this study does not use it in the gravity model in the methodology chapter due to the lack of data. Thus, this has been addressed in the limitations chapter of the dissertation. Towards this end, this research discussed the economic statecraft of the UAE from trade and investment perspective in the West and developed countries; it is also crucial to look at the economic, diplomatic efforts the UAE placed

in the developing countries. The UAE along with its GCC neighbours have seen a shift the development aid philosophy. The so-called “emerging donors” have been used to describe this shift (Woods, 2008).

Towards this, it is vital to discuss the Development Assistance Committee (DAC), which was formed in the 1960s with a mandate to coordinate and promote aid from donor states of the Organization for Economic Co-operation and Development (OECD). DAC is a community of shared values, in that its members largely problematize development as appropriate relationships between state and market in the liberal democratic tradition (Kragelund, 2008). With the term “Emerging donors” described above, however, Young (2017b) argues against calling the GCC countries as “emerging” but slightly diverging from the DAC standard methodology of providing foreign aid or assistance.

When looking at the UAE as part of the GCC and the Arab League, the pattern of ODA disbursement has seen various fluctuations for which many researchers attributed these fluctuations to political reasons (Almezaini, 2012). While examining the numbers, a surprising attribute of the Arab countries’ foreign aid since 1973 has been witnessed, which is its generosity. On average, Arab aid was approximately 4.7% of their combined GNI in the initial period from the start up to 1978 while the DAC countries averaged 0.3% in the same period (van den Boogaerde, 1990). Declining in the following years, the average annual net ODA provided by Arab countries still represented 1.5 per cent of their GNI during the period 1974-1994, which is substantially more than the average contributions of DAC countries, which amounted to 0.3 % of their GNI during the same period as per the OECD in 1995 (Neumayer, 2003; Villanger, 2007).

Historically, there have been increased stances in which the Gulf states in general, and the UAE, in particular, used foreign aid for political goals related to various shifts in the political economy outlook. The return from foreign aid is not calculated as a pure financial figure. The return includes market access, market dominance, and priority over regional rivals in the investment/aid target space, and forward-looking opportunities for state-related entities to make profitable partnerships, often with a medium to the long-term trajectory (Young, 2017b). The clearest example of the above approach has been in the UAE foreign policy towards Egypt after 2013. The UAE-Egyptian relationship continues to evolve, and so does the foreign aid program with Egypt in which UAE ODA's in Egypt totalled US$8 Billion till 2016.

The UAE economic intervention in Egypt has included key sectors of both economies. The investment and aid in wheat production indicate a shared security concern over food security for the UAE and food stability for Egypt. The UAE investment in food production has been delayed in the conflict in Egypt, as the legal institutions that might facilitate investment have challenged some of the mechanisms of cross-border interaction. UAE investment in large scale construction projects in Egypt also plays to the Emirates' strengths in state-related entities that can manage development goals hinging on an expansive property sector, fuelled by a bank sector that lends heavily to construction and real estate entities. The banking sector in the UAE can extend such large lines of credit specifically because the government deposits of oil revenues go into local banks and are then restricted on investment vehicles. Local banks do not provide favour complex debt instruments, so asset-backed loans of construction and real estate are privileged (Young, 2017b).

In conclusion, Economic Diplomacy, in literature, has been examined from many different angles starting from the meaning of Economic Diplomacy and its definition. Some authors compared it to various other forms such as Commercial diplomacy and business diplomacy. The literature is quite extensive when it comes to the tools. Governments use in order to execute their political agenda using economic diplomacy. G20 countries such as China have been seen to exercise various types of economic diplomacy in Asia, and Africa wither bilaterally or multilaterally in the UN, WTO, ASEAN and other international organisations. Japan, South Korea, The United States and the United Kingdom established specialised entities that look after their foreign trade and investments as well as determine actions relevant to economic diplomacy principles in order to achieve their foreign policy agenda objectives.

1.4 Potential Contributions and Limitations of the Study

The importance of this dissertation is drawn from the recommendations that it provides to the decision makers and the uniqueness of the variables chosen specifically for the United Arab Emirates. These recommendations also contribute to the United Arab Emirates Vision 2021 (2010). This dissertation has significant importance towards the fundamental transformation in the foreign policy of the United Arab Emirates to become increasingly global in its outlook, through the international engagement of its trade and investment soft power to achieve key foreign policy goals. By identifying specific economic diplomacy means and their impact on the overall trade and investment flows, this dissertation serves as a guiding document to identify which means to be used in what region and the exact impact each attribute has on the overall trade and investment flows.

Meanwhile, this dissertation also has its limitations, in addition to rooms for future research that could be conducted to continue the work in this dissertation. First and foremost, the research methodology that was used has been quantitative, whereas qualitative approaches could be employed to improve the outputs and results.

Also, the choice of the variables for the gravity models of trade and investment could have been expanded to include more variable that also reflects the economic diplomacy tools that the United Arab Emirates use. Therefore, future research could include other variables that may improve the model such as the state visits, ministerial visits and trade missions to test their impact on both trade and investment between the UAE and various countries around the world. Other factors that may be looked at and included in future research are the visa exemption schemes applied by both the United Arab Emirates and other countries towards their nationals, as this also may explain the variation in the trade and investment flows.

A significant factor that may be included in future researches gravity models is the amount of Official Developmental Assistance (ODA) either in the monetary format of in capacity building format. Humanitarian assistance and developmental incentives provided by the United Arab Emirates to developing and developed countries around the world may play a role in affecting the total bilateral flow of foreign direct investments and non-oil trade.

A critical economic diplomacy tool that is often used by the United Arab Emirates and should also be evaluated in future research are joint committees. Although these committees take several forms based on the speciality and objectives intended out of them, they always include an objective to boost the bilateral foreign direct investment flows and non-oil trade flows. The join committees either at the foreign affairs level

or at the economic level may be included in future research to test the impact that they bring to the flows of foreign direct investments and non-oil trade as they were initially intended to do. It will also be interesting to see which regions these economic tools do are most active.

Another element that could be explored in future research is connectivity and its impact on the flow of trade and investments. First, air service agreements and the scheduled number of flights either passenger or cargo could be explored to examine their impact on the flow of Trade and Investment. As the UAE proudly hosts four airlines namely Emirates, Etihad, Air-Arabia and Fly-Dubai, it would be interesting to observe the extent of their influence on trade and investments. Similarly, Ports and Marine linkages could also be examined especially with the sizable investments DP World has made across the globe to bring together a nexus of seaports connected via Jebel Ali and using the latest technologies in ports management. The effects of the number of ports operated by DP World about the magnitude of trade and investments of the UAE is an interesting analogy to explore. The logistics sector has played a vital role in leaping the UAE forward in its economic development since its inception in 1971 and thus would also be interesting to test the extent of this sectors effects on the overall trade and investments.

Also, given the important transport and logistics sectors in the diversification efforts and in boosting trade and investment, continuation research in this field shall be of great importance using a generalised gravity model to test the effectiveness of this sector on the trade and investment. The State-owned enterprises', in the fields of aviation, maritime and road infrastructure development, role in economic diplomacy could also be examined.

Furthermore, future research should explore the possibility of including variables that denote the property right protections, expropriation risks, corruption and examine their effects on the overall flow of bilateral non-oil trade as well as the flow of foreign direct investments and capital flows. This variable may also be interacting with the other economic diplomacy tools and contribute in explaining the variation of the total trade and investments. Moreover, intrinsic factors to the embassies and consulates could also take into consideration for future research and as variables in the gravity model such as a number of staff, qualifications, budget, and experiences of the staff in those missions.

The last but not least economic diplomacy tool that could be included in future research is the establishment and continuation of the bilateral Business Councils. It would be interesting to see if the business councils are really effective in boosting the bilateral foreign direct investment flows and the bilateral non-oil trade between the United Arab Emirates and other countries around the world. Moreover, to test for the regions that business councils are most effective with.

All in All, future research areas would also include studying and testing for the economic diplomacy tools effectiveness against various regions separately in full-fledged dissertations or articles, especially those regions that showed greater potential in this dissertation. It would be interesting also to drill down the regression analysis to the countries level in order to identify which economic diplomacy tool is most effective with which country and what economic diplomacy tools to avoid when dealing with each country alone. Also, of importance is the anecdotal evidence, cases and other examples of economic diplomacy successes or failures, as a vehicle for telling the economic diplomacy story.

Chapter 2: Methods

This Chapter of the Dissertation outlines the high-level research aims that highlight the targets that are intended to be achieved in this dissertation. It will also list the research objectives that are intended to materialize. Thereafter, the research questions of my DBA thesis are listed and serve as the building blocks of this research. Each research questions has a set of hypotheses that have been tested throughout the Dissertation in order to draw conclusions and recommendations.

2.1 Research Design

2.1.1 Research Aims

The aim of this dissertation is to shed lights on the impact of Economic Diplomacy in the UAE Foreign Policy on bilateral foreign investment and trade. In addition, the research is intended to shed lights on the tools of the Economic Diplomacy that are being used by the UAE senior officials, ministries and other non-state actors and their effect on the aforementioned outcomes. The research also evaluated the effectiveness of the used tools and whether other tools could be of greater impact on trade and investments flows. The ultimate target is to provide a sound and empirically tested recommendations and conclusions to UAE decisions makers in Foreign Policy and its subset “Economic Diplomacy”.

2.1.2 Research Objectives

The research has two main objectives that ought to be achieved through this DBA dissertation:

i] Assess the effectiveness of the Economic Diplomacy tools in delivering the desired outcomes on trade and investment and ultimately on the political bilateral and multilateral weight of the UAE.

ii] Examine the inter-relationship between the desired trade and investment outcomes and the agreements either bilateral or Free Trade Agreements signed on a multilateral level through the GCC and their impact on the flow of trade and investments.

2.1.3 Research Questions and Hypothesis

To evaluate the level of impact that Economic Diplomacy has had, if any, on the bilateral flows of investment and trade between the UAE and its major economic partners. This dissertation addresses the following two research questions and hypothesis:

i] RQ1- *Does Economic Diplomacy affect the bilateral trade between the UAE and other countries*?

- H_{01}: Economic diplomacy affects bilateral trade between the UAE and other countries.
- H_1: Economic diplomacy does not affect bilateral trade between the UAE and other countries

ii] RQ2- *Does Economic Diplomacy affect the bilateral flow of investments between the UAE and other countries*?

- H_{02}: Economic diplomacy affects bilateral investment flow between the UAE and other countries
- H_2: Economic diplomacy does not affect bilateral investment flow between the UAE and other countries

2.2 Theoretical Framework

Looking into the theoretical framework of the thesis, realist theories of international relations argue that the foreign political agenda drives the international trade. In a revolutionary international system with no strong supranational governing body, it is the responsibility of states to ensure their own survival. Empirically, bilateral trade is higher amongst political alliances (Gowa & Mansfield, 1993). In opposition to realism, liberalism argues that trade and international discourse have a significant impact in influencing foreign relations. This framework argues that countries are more concerned with absolute gains.

While commercial liberalism particularly argues that the gains of international trade and capital flows will lead to greater peace as countries increase economic ties, and reduce tensions in the international politics (Moravcsik, 2001). All in All, Realism and liberalism represent ideal types, the relationship between politics and international trade is usually far more complex, and causality between the two might be both ways and either way. Similar to trade, the economic literature has also argued that quality of government in the host country and bilateral political relationship affect Foreign Direct Investments (FDI) (Gawarkiewicz & Tang, 2017).

Politics, both home and international, are important determinants of the FDI. Multinational Enterprises (MNEs), which have various portfolios of investments abroad usually demand a risk premium for the uncertainty associated with instability in the country they invest in and thus will invest less or require a higher risk adjusted rate of return (Busse & Hefeker, 2007).. The flow of investments are also affected by the trade barriers being tariff or non-tariff related. Hence, if political tensions restrict

trade between two countries, MNEs would have less incentive to invest across the border (Gawarkiewicz & Tang, 2017).

In order to oppose the effects of politics on trade and investments, international economic organizations such as the World Trade Organization WTO and bilateral investment treaties have helped to insulate international economic transactions from politics (Desbordes & Vicard, 2009). The WTO main mandate is that works to reduce trade barriers in both the trade of goods and services under the GATT and GAATTS. While the membership in the WTO may decrease the influence of tension on trade as its liberalization rules limit mercantilist practices like discriminatory tariffs, the WTO, at the same time has no enforcement mechanism on its rulings. Despite the absence of an enforcement mechanism other than the dispute settlement body, most countries, knowing the resulting trade war would hurt their interests, comply with the WTO and avoid mercantilist practices, fostering growing trade amongst all WTO members (Bello, 1996).

2.3 Data Collection and Model

The research methodology will comprise of a quantitative approach that will lead to test each hypothesis and arrive at a conclusion. The reason I choose such an approach is because the thesis will focus on various variables related to trade and investments and its correlation with economic growth and the changes they both bring to the intergovernmental legal and political stance. The gravity model has been applied to a wide variety of goods and services moving across regional and national borders under different circumstances since the early 1940s (Oguledo & Macphee, 1994). Some other researchers refer to the sixties era as the econometric studies were spawning especially the work of Tinbergen (1962) and Pöyhönen (1963) while a more classic yet early

application of the gravity model in analysing international trade was used by Linnemann (1966).

According to (Anderson & Van Wincoop, 2003) the gravity model or equation is one of the most empirically successful methods in economics. It relates bilateral trade flows to GDP, distance, and other economic and trade factors. It has been widely used to infer-trade flow effects of institutions such as customs unions, exchange-rate mechanisms, ethnic ties, linguistic identity, and international borders. Contrary to what is often stated, the empirical gravity equations do not have a theoretical foundation. The theory, first developed by Anderson (1979), tells us that after controlling for size, trade between two regions is decreasing in their bilateral trade barrier relative to the average barrier of the two regions to trade with all their partners. Intuitively, the more resistant to trade with all others a region is, the more it is pushed to trade with a given bilateral partner.

One methodology is building a causal model of UAE-X countries trade and growth for policy analysis. Hoa (2007) used an approach that he first introduced in 2002 called the Generalized Gravity Theory (GGT). This dissertation uses a similar approach to empirically study foreign trade and investment flows and its causal link with economic growth in the UAE. The main features of the GGT modelling approach is that it assumes no a priori (for example linear and log-linear) functional forms. The GGT modelling approach incorporates foreign direct investments, services and other reform and non-economic events that had an effect on the volumes of trade and investment flows in the recent years; and it explicitly incorporates interdependence between trade, growth and major macroeconomic activities in the trading economies (Krueger, 2007).

As there are multiple factors influencing trade and investment flows, this study attempts to address them using a gravity model used by Yakop and van Bergeijk (2011) for the trade flows and the model used by Gawarkiewicz and Tang (2017) for the investment flows. Data has been collected from historical data that exists within the databases of the federal and local authorities such as the Federal Customs Authority, Ministry of Economy, Ministry of Finance, The Central Bank, Ministry of Foreign Affairs and International Cooperation and statistics centres of each emirate where applicable. The data set will involve the flows of trade and investments, statistical data on the bilateral agreements, statistical data on the multilateral free trade agreements, and the number of embassies and trade offices as well as their geographic locations. While some data related to the macroeconomic indicators will be obtained from international databases such as the CIA Fact Book, The World Bank, UNCTAD, the IMF and the Economist Intelligence Unit databases.

2.3.1 Gravity Model for Trade

Bilateral foreign trade plays a key role in the process of economic development in any country. The overall trade nexus comprises of the flow of exports and exports into and out from the country to its counterpart and carries the same importance in this case. Each country ultimately imports raw materials, intermediate and capital goods to expand and improve its production base and to support the export growth if these goods are not available domestically. In addition, the imports of consumer goods are also important to provide the necessary supply for the domestic demand for goods. On the contrary, the export of goods is essential to counter the foreign exchange gap, to enhance the import capacity of the country and to reduce dependence on foreign aid.

It is believed that boosting the import capacity has positive effects on the efforts exerted by a country towards industrialisation and boosts the overall economic activities, which, in turn, could enhance the economic growth. Therefore, the country's participation in the global trade is considered the most important enabler to fast economic growth and development (Rahman, 2009). The gravity model has been applied to a wide variety of goods and factors of production moving across regional and national boundaries under different circumstances since the early 1940s and was used to estimate trade flows especially when derived from a linear expenditure system (Oguledo & Macphee, 1994).

Towards this end, Rahman (2009) argues that there are various ranges of applied research where the gravity model is used to examine the bilateral trade patterns and trade relationships. He also confirmed that those studies use the gravity model both for the aggregate bilateral trade and also for product level trade. Both the cross -section and panel data approaches have been used by these studies. Some examples of the uses of gravity model in estimating trade relations have been examined. Rahman (2003) examines the determinants Bangladesh trade using panel data estimation technique and generalized gravity model. The author considers both economic and natural factors when estimating the gravity model. The study covers data of 35 countries for 28 years (1972-99).

Batra (2006) had also used an augmented gravity model to estimate India's trade potential. The model is based on cross-section data of 2000, in addition, he attempted to analyse the world trade flows and the coefficients to predict Indians trade potential. According to Christie (2002) Gravity models have been used extensively in recent years to try to quantify potential trade levels, particularly with transition countries. She

discussed the variables of the gravity model in the case of Southeast Europe, with a specific emphasis on trade flows with and within south-east Europe. In a sample of 76 countries, Kalbasi (2001) examined the volume and direction of trade for Iran dividing the countries into developing and industrial countries.

On similar lines, Frankel, Stein, and Wei (1997) used cross-section and panel data in applying the gravity model to examine roles of trading blocs, currency links, and others. Analysing the bilateral trade patterns worldwide (Frankel, Wei, Canzoneri, & Goldstein, 1995) examined the impact of currency blocs and exchange rate stability on trade. Anderson and Van Wincoop (2003), and Magee (2003) analysed the impact of multilateral factors on bilateral trade flows. In addition to the examples above, a more recent development of a gravity model was done by UNCTAD-WTO Trade Centre and it is called TradeSim. It is being used to estimate the trade potential for countries with limited trade relations in the past especially transition economies. The main purpose of it is to analyse the bilateral trade flows of developing countries with their trading partners (Batra, 2006).

In estimating the trade relations based on various variables, this study used a gravity model following the work of Yakop and van Bergeijk (2011). This entails the inclusion of the instruments of economic diplomacy in a traditional trade model. As this thesis deals with the actual repercussions and impacts of economic diplomacy tools on the level of bilateral trade flows, the choice of the gravity model is almost unavoidable especially that the gravity model presently is accepted both in academic and in policy circles (Yakop & van Bergeijk, 2011). In addition, robustness and general acceptance of the method are essential for the analysis conducted in this dissertation.

The Augmented gravity model equation to be estimated is as follows:

$$ln(Xij) = \beta_0 + \beta_1 ln(D_{ij}) + \beta_2 ln(Y_i * Y_j) + \beta_3 ln(Pop_i * Pop_j) + \beta 4\ ln(Area_i * Area_j) + \beta_5 EmbCon_{ij} + \beta_6 EmbCon_{ji} + \beta_7 Landlocked_{ij} + \beta_8 Island_{ij} + \beta_9 Language_{ij} + \beta_{10} BorderShare_{ij} + \beta_{11} Colonized_{ij} + \beta_{12} FTA_{ij} + \beta_{13} BIT_{ij} + \beta_{14} DTAij + \varepsilon_{ij}$$

Where i and *j* denotes the countries and *Xij* denotes the value of the total bilateral trade between *i* and *j*.

The explanatory variables in the augmented gravity model are as follows[1]:

i] *Distance:* D is the distance between country i and country j measured between the two latitude-longitude combinations. A major proportion of trade today goes by air (and not by sea or land) and therefore the air routes provide the most convenient justification for using the straight line or great circle measure of distance. The ultimate justification is of course given by the fact that this measure seems to be a reasonable measure of averaging across different modes of transportation and works well in practice. The data was obtained using distance calculations between the GPS Coordinates of the capital cities in both countries.

ii] *GDP per Capita: Y* denotes the GDP per capital PPP – Purchase Power Parity - in US Dollars for each country i and j for a given year. The data was obtained from the Economist Intelligence Unit databases that were derived from the International Monetary Fund (IMF). From a mathematical perspective, it is indeed equivalent, whether the use of explanatory variables as GDP and per capita GDP, or as GDP and population, in this dissertation the former has been chosen. In particular the specification with GDP per capita allows to explore the link between a country's trade and its stage of development. Several

[1] See Table 1 in Appendix

explanations have been provided in the literature for inclusion of GDP per capita as an independent variable in addition to GDP. One possible explanation for the independent effect of per capita GDP is that the demand for foreign merchandise is superior as it appeals more to the consumers of one country more than the local merchandise. Other possibilities arise out of the literature on endogenous growth. For example, the process of development may be led by the innovation or invention of new products that are then demanded as exports by other countries. It is also useful to focus explicitly on GDP per capita as a determinant of trade.

The standard gravity model predicts that countries with similar levels of output per capita will trade more than countries with dissimilar levels (Batra, 2006). This is true of the Helpman and Krugman (1985) theory, as it states that the magnitude of bilateral trade flows should increase with increasingly equal distribution of national income i.e. GDP Per Capita between both countries. This however contradicts the traditional Hecksher-Ohlin theories of trade that predict that countries with dissimilar levels and also types of produce will trade more than countries with similar levels (Heckscher & Ohlin, 1991). The Linder hypothesis (Linder, 1961) states that that the volume of trade between two countries is larger the closer they are in terms of per capita income; this fact is due to the export potentiality developed in the two markets by the similar national demand patterns that accompany similar levels of income (Basevi, 1970). This hypothesis is often viewed as similar to the Krugman-Helpman theory in its predictions.

iii] *Population Pop:* Denotes the average population of countries I and j for a given year. The values were obtained from the Economist Intelligence Unit that was derived from the International Monetary Fund IMF statistics. The population variable was also used in many scholarly works when estimating trade flows as a determinant factor of the magnitude of goods and services among countries. In addition to the above standard variables in the gravity model, another explanatory variable has been added similar to the one developed by Yakop and van Bergeijk (2011) and the variables used by Batra (2006).

iv] *Embassy or/and Consulate EmbCon:* This variable denotes the number of embassies and consulates of each country I and j that have been established in both countries at any point in time. The Data was obtained from the Ministry of Foreign Affairs and International Cooperation of the United Arab Emirates.

v] *Area:* the area of the country in square kilometres as reported in the CIA World Fact Book 2018 (The Central Intelligence Authority, 2018). In addition to the above explanatory variables, the research intends to assess the impact of geographical and historical factors between countries on bilateral trade as well as examine the effects of bilateral and multilateral trade agreements. Therefore, dummy variables were used as shown below:

vi] *Language Lang:* the variable is binary in nature and denotes whether countries *i* and *j* share a common language or not. The data was constructed based on the official languages of the countries as obtained from CIA world Fact book 2018.

vii] *Border Share:* the variable is binary in nature and denotes whether countries i and j share borders together. The data was constructed via geographical maps obtained from Google.com.

viii] *Land Locked:* the variable is binary in nature and denotes whether country j is landlocked or not. The Data was obtained from CIA World Fact Book 2018.

ix] *Colonized Col:* the variable is binary in nature and denotes whether country i and j have been both colonized and not. The Data was obtained from CIA World Fact Book 2018.

x] *Island:* the variable is binary in nature and denotes whether country j is an island or not. The Data was obtained from CIA World Fact Book 2018.

xi] *FTA:* the variable is binary in nature and denotes whether a Free Trade Agreement is in place between countries i and j. this dissertation only included Free Trade Agreements that are signed, ratified and are currently in effect. The Data was obtained from the UAE Ministry of Economy.

xii] *BIT*: the variable is binary in nature and denotes whether a Protection and Promotion of Investment Agreement is in place between countries i and j. This research only included Protection and Promotion of Investment Agreements that are signed, ratified and are currently in effect. The Data was obtained from the UAE Ministry of Finance.

xiii] *DTA:* the variable is binary in nature and denotes whether the Avoidance of Double Taxation on Income Agreement is in place between countries *i* and *j*. this research only included Avoidance of Double Taxation on Income Agreements that are signed, ratified and are currently in effect. The Data was obtained from the Ministry of Finance UAE. The data collected covers the period from 1999 till 2016 for 185 countries that are trading partners with the UAE. Due to unavailability of bilateral trade data and incomplete historical economic indicators, the following countries were excluded from the data

sheet: Andorra, Israel, Liechtenstein, Monaco, Nauru, North Korea, Palestine, San Marino, Somalia, and South Sudan.

2.3.2 Gravity Model for Investment Flows

The work of Pollins (1989b) followed by (Hoa, 2007) and more recently the paper published by Gawarkiewicz and Tang (2017). This dissertation uses the gravity model augmented with political variables as a 'distance' variable as used by Gawarkiewicz and Tang (2017). The dependent variable in the augmented Gravity model developed below is the log bilateral FDI volume *(ln(FDI)).* To measure the size of a pair of countries, *i* and *j*, the log of FDI flows are determined by the log product of both sides GDP *(ln(GDP)),* the log of product of their population (*ln*(*population*).

The key variables of interests are legislations and bilateral and regional agreements in the past when making an investment decision *(BIT, DTA, FTA)* while also adding the diplomatic missions to test for diplomacy effect on the flow of capital between the UAE and other countries and regions. Moreover, dyad random effects $ø_{ij}$ has been included to allow the error term $Ɛ_{ijt}$ to be clustered at country level. Note the dyad random effects would absorb the effects of time constant factors such as the existence of embassies, and the binary dummy variables.

The model reflects the same variables in trade in order to compare and contrast and arrive at a conclusion of which factors affect the flow of investments and trade in which regions. As there will be a large number of observations where the FDI figure is zero and this limits the variation in the FDI variable, Hence, the baseline model for annual bilateral FDI flow is:

$$Prob(FDI_{ijt}>0) = \Phi(\gamma_0 + \gamma_1 \ln(GDP_{ijt}) + \gamma_2 \cdot \ln(D_{ij}) + \gamma_3 \cdot \ln(Pop_{ijt}) + \gamma_4 \cdot \ln(Area_{ij}) + \gamma_5 \cdot (EmbCon_{ijt}) + \gamma_6 \cdot (EmbCon_{jit}) + \gamma_7 \cdot (Landlocked_{ij}) + \gamma_8 \cdot (Island_{ij}) + \gamma_9 \cdot (Language_{ij}) + \gamma_{10} \cdot (BorderShare_{ij}) + \gamma_{11} \cdot (Colonized_{ij}) + \gamma_{12} \cdot (FTA_{ijt}) + \gamma_{13} \cdot (BIT_{ijt}) + \gamma_{14} \cdot (DTA_{ijt}) + \varnothing_i + \varnothing_j + \mu_{ijt}).$$

Where Φ is the density function for a normal distribution, and

$$\ln(FDI_{ijt}) = \theta_0 + \theta_1 \cdot \ln(GDP_i * GDP_j) + \theta_2 \cdot \ln(D_{ij}) + \theta_3 \cdot \ln(Pop_i * Pop_j) + \theta_4 \cdot \ln(Area_i * Area_j) + \theta_5 \cdot (EmbCon_{ij}) + \theta_6 \cdot (EmbCon_{ji}) + \theta_7 \cdot (Landlocked_{ij}) + \theta_8 \cdot (Island_{ij}) + \theta_8 \cdot (Language_{ij}) + \theta_8 \cdot (BorderShare_{ij}) + \theta_8 \cdot (Colonized_{ij}) + \theta_8 \cdot (FTA_{ij}) + \theta_8 \cdot (BIT_{ij}) + \theta_8 \cdot (DTA_{ij}) + \varnothing_i + \varnothing_j + \upsilon_{ijt}$$

The variables above in the model have already been explained in Table 1 of the Appendix[2].

2.3.3 Econometric Issues

This section showcases the diagnostic statistical techniques to determine the model fitness with the data that have been compiled. Since this dissertation has explanatory variables along with dummy variables, the natural logarithm of the variables have been used such that systematic changes in the spread of the residuals with the dependent variable is minimized. The purpose is to remove that systematic change in the spread and achieve a linear relationship between the dependent variable and the independent explanatory variables. Therefore, the main econometric issues that shall be examined in this thesis are normality, multicollinearity, and heteroscedasticity.

[2] See Appendix – Table 1

2.3.3.1 Normality

Statistical errors are common in scientific literature and about half of the published articles have at least one statistical error (Ghasemi & Zahediasl, 2012). Therefore, there is a need to check the assumption of normality, namely parametric tests, because the model validity depends on it. The aim of this subsection is to overview checking for normality in statistical analysis using Stata/IC 15.

First, visual inspection of the distribution techniques was performed to assess normality, although this approach is usually unreliable and does not guarantee that the distribution is normal. However, when data are presented visually, readers of an article can judge the distribution assumption by themselves.

As shown in (see Appendix – Figure 1), the Probability-Probability Plot (P-P Plot) was generated and shows that data follow a normal distribution for the following explanatory variables: Total Trade, Distance, Yij*Yji, Area i * Area j, and Pop i * Pop j except the EmbCon ij and EmbCon ji which are shown to not be normally distributed. However, all the dummy variables have shown non-normality which was expected due to their binary attributes. After that, statistical normality test was conducted in order to test for normality, namely the Shapiro-Wilk W Test for normal data (see Appendix – Table 3). Therefore, as shown in the table above, the normal approximation to the sampling distribution of W is not valid. Moreover, the Prob. > z value is less than 0.05, therefore the null hypothesis that the data are normally distributed is rejected. Hence, there is no evidence to support the normality of the independent variables data.

However, Shapiro-Wilk's test has an issue when it comes to large data sets i.e. when you feed it more data, the chances of the null hypothesis being rejected becomes larger.

So, what happens is that for large amounts of data even very small deviations from normality can be detected, leading to rejection of the null hypothesis event though for practical purposes the data is more than normal enough. As shown in Appendix - Table 3, a skewness and kurtosis tests were performed that show each variable characteristic in that regard. As a general rule of thumb: If skewness is less than -1 or greater than 1, the distribution is highly skewed. If skewness is between -1 and -0.5 or between 0.5 and 1, the distribution is moderately skewed. If skewness is between -0.5 and 0.5, the distribution is approximately symmetric (Brown, 2008-2017).

Consequently, the table shows that the following variables are highly skewed: Area i*Area j, Language, Island, BIT, DTA and *EmbCon* ij. While moderate skewness was observed in the following variables: Distance and *EmbCon* ji. Finally, approximate symmetry is observed in the following explanatory variables: Yij*Yji, and Pop i*Pop j.

For Kurtosis, the rule of having excess kurtosis that was applied is that if the value of the kurtosis is less than -2 and the smallest acceptable kurtosis is 1. Therefore, for all variables, it is observed that kurtosis is within the acceptable range. In addition, and due to the large number of observation in our panel data the P-P Plot of the error term was used as shown in Appendix – Figure 3, the Probability-Probability Plot (P-P Plot) of the Error term shows that there is enough evidence that the data follows a normal distribution for the panel data. Therefore, and in light of all of the above, there is an overwhelming evidence that the panel data follows a normal distribution.

2.3.3.2 Multicollinearity

In order to test for multicollinearity, simple correlation table was generated as well as the Variance Inflation Factor to test for autocorrelation and hence multicollinearity.

Therefore, simple correlations are small (refer to Appendix – Table 5), in addition the Variance Inflation Factor (VIF) was conducted in order to measure how much the variance of the estimated regression coefficient are inflected as compared to when the predictors variables are not linearly related. It was observed (See Appendix – Table 6) that all VIF's are less than 10 which leads to conclude that there is no evidence of having a multicollinearity problem.

2.3.3.3 Heteroscedasticity

To test for heteroscedasticity, two techniques were used. First, the visual inspection of the residuals plotted against the fitted values was used (See Appendix – Figure 2). It was observed that the plot of residuals shows some uneven envelope of residuals, so that the width of the envelope is considerably larger for some values of X than for others. Therefore, a more formal test for heteroscedasticity is conducted namely the Breusch-Pagan / Cook-Weisberg Test for Heteroscedasticity to detect any linear form of heteroscedasticity (See Appendix – Table 7). Breusch-Pagan / Cook-Weisberg tests the null hypothesis that the error variances are all equal versus the alternative that the error variances are a multiplicative function of one or more variables. As shown in the results of the test, Chi-square value is 453.73 which is large enough to reject the null hypothesis, as evidence of heteroscedasticity.

2.3.3.4 Model Selection

This presents Panel Data Fixed Effects, Random Effect, and Pooled Ordinary Least Square (OLS) Model. As the data is in panel format, it is inevitable to evaluate for Pooled OLS, fixed and random effects and determine which model to use. I ran the tests according to the methodology described by Park (2011) for panel data modelling and selection.

Appendix – Table 8 shows the results of the F-test which test for fixed effects in both the trade and investment models. As the p-value is less than 0.05, there is a significant fixed effect and a significant increase in the goodness-of-fit in the fixed effect model in both trade and investment models; therefore, the fixed effects model is better than the pooled OLS. Appendix – Table 9 shows the results of the Breusch-Pagan Lagrange multiplier (LM) test results for both the trade model and the investment model which has a p-value less than 0.05, and hence there is a significant random effect in the panel data of both Trade and Investment, and that the random effect model is able to deal with heterogeneity better than does the pooled OLS.

To select which model to use either fixed effects model or random effects model for trade and investment models. The Hausman test for both the Trade Model and the Investment Model have been used but was inconclusive as shown in Appendix – Table 10. The Hausman test returns -196.16 for Trade data and -14.99 for Investment data and warns that data fail to meet the asymptotic assumptions in both cases. Although the chi-squares score is small enough not to reject the null hypothesis, it is not conclusive that the random effect model is better than its fixed counterpart.

However, given the problem with fixed effects model which fails to estimate any time-invariant explanatory variable, which exist in the panel data. In addition, to the fact that Hausman test was inconclusive to reject or not to reject the null hypothesis for both panel data sets. Therefore, this dissertation requires the use of Generalized Least-Square Random Effects model with robust standard errors for both trade data and investment data.

2.3.3.5 Overall Model Assessment Outcomes

As shown in the previous subsections on the econometric issues examined in this dissertation, it has been concluded that all the assumptions have been met, except heteroscedasticity assumptions. Therefore, in order to correct the heteroscedasticity issue, the Panel Data linear-regression with Generalised Least-Square Random Effects model with robust standard errors in both trade as well as investment augmented gravity models have been used in this dissertation. Therefore, the model fits the data and the model shall be used for evaluating the hypothesis in the subsequent chapters. Summary statistics of both models have been performed and are exhibited in Appendix-Table 2.

Chapter 3: Results

Results are the outcome of our research within which it shall summarise the data collected and the statistical treatment of them. In addition to the observations and measurements recorded while conducting the procedures described in the methodology chapter while addressing the research questions raised in chapter 2 and any hypotheses formulated there.

3.1 Trade Results and Regression Analysis

First, the regression was performed on the data to estimate the results of the augmented gravity model for total trade (See Appendix - Table 9). There is enough evidence to support the validity of the model and that the model fits the data well. There is also have enough evidence that 72.29% of the variation of total trade is explained by the variation of the independent variables. The remaining 27.71% variations are attributed to other variables that may not be included in our Gravity Model. The model successfully ran across 3156 observations of 185 countries.

We are moving on to look at the explanatory variables results. The coefficient of Distance is negative and highly significant (-1.07). This implies that the UAE tends to trade less with more distant countries (p-value =0). The UAE's bilateral trade tends to increase with countries which have higher GDP per Capita as the coefficient is positive and equals 1.07. The variable Yj * Yi demonstrated very high significance (p-value=0). When looking at the population variables coefficients, it has been observed that there is a higher tendency to do trade when the UAE's and its partner's population grows, and the magnitude of increase in trade is the highest among all coefficients and is statistically significant (p-value=0). This may be attributed to the growth in demand

by the consumers on one end, while there are abundance and variation in the offered goods from the other end. This ultimately leads to an increase in total bilateral trade.

On the contrary to the population variable, it has been observed that Area negatively affects the total bilateral trade of the UAE. The larger the trading partner is in total area in square kilometres, the less the total trade value between them. The variable also shows high significance statistically (p-value =0). The bilateral trade of the UAE has been shown to be influenced by diplomatic missions and consulates, the model provides enough evidence with high significance (p-value=0.004) that the Total Bilateral Trade of the UAE is negatively related to the number of UAE Missions, Embassies and Consulates abroad as the coefficient is negative and equals to -0.242. However, the variable of the number of foreign Embassies and Consulates in the UAE is shown to be statistically insignificant with a p-value=0.152. Next is to observe the results of the dummy variable in our augmented gravity model.

As shown in the same table, it has been observed that there is a very high significance of having a common language with the UAE, i.e. Arabic as an official language, in influencing the trade flows positively. Therefore, having Arabic as an official language in a country tends to increase the Bilateral Total Trade. The language variable coefficient is equal 1.72 wish a p-value equals 0. Interestingly, the Model predicts an insignificant negative impact of having a border with the UAE on the Total Bilateral Trade flow as the coefficient is -0.318and the p-value is equal to 0.765.

Our trade model shows an insignificant positive impact of being a landlocked country on the total bilateral trade with the UAE, as the coefficient is equal to 0.034 (p-value=0.905). In the case of that trading country being ever colonized, the results obtained from the augmented gravity model show an insignificant positive coefficient

of 0.739 (p-value=0.36). Similarly, the countries attribute of being an island or not is statistically insignificant in our model and thus has no linear relationship with the total bilateral trade (p-value=0.893).

On the legislative front, the model revealed an insignificant relationship between FTA's and total bilateral trade (p-value=0.189). Moreover, the total bilateral trade between the UAE and other countries is shown to be non-linearly related to having an Investment Promotion and Protection Agreement (BIT/IPPA) and the Avoidance of Double Taxation on Income (DTA). Therefore, both variables are insignificant with p-values equal to 0.319 and 0.054, respectively.

3.1.1 Analysing the UAE Trade per Geographic Regions

In an attempt to examine the effects of the economic diplomacy tools on the total trade geographically, the 185 countries were divided into their respective regions as per the United Nations standards, the World Bank Standard. Also, the current classification used by the Ministry of Foreign Affairs in the UAE has been taken into consideration when doing the former. The gravity model was tested to observe the effects of the variation in the independent variables on the dependent variable namely *Total Trade* using the Random Effects GLS model. Next is to look at the regions in alphabetical order. A graphical representation of the results for the trade model is shown in Appendix - Figure 4 for the factors that boost the bilateral non-oil trade and Appendix - Figure 5 for the factors that reduce the bilateral non-oil trade.

3.1.1.1 Sub Saharan Africa – An Emerging Market with Potential for the UAE

As observed in the results, there is enough evidence to support the validity of the model and that the model fits the data well. There is also enough evidence that 61.81% of the

variation of total trade is explained by the variation of the independent variables. The remaining 38.19% variations are attributed to other variables that may not be included in our Gravity Model. Next is to observe the results of the coefficients of the explanatory variables.

The coefficient of Distance is negative but insignificant (p-value=0.511). The UAE's bilateral trade tends to increase with Sub Saharan African countries which have higher GDP per Capita as the coefficient is positive and equals 1.51. The variable Yj * Yi demonstrated very high significance (p-value=0). When looking at the population variables coefficients, it is observed that there is a higher tendency to make a trade with sub-Saharan African countries that have a higher population, the variable is statistically significant (p-value=0).

Similar to the case with all countries, it is observed that Area negatively affects the total bilateral trade of the UAE with Sub Saharan Africa. The larger the trading partner is in total area in square kilometres, the less the total trade value between them. It is also observed that Area is the largest negative coefficient of -22.12 with a p-value=0. This attribute effect is mainly because of the vast areas in Africa, and population distribution hinders the flow of trade as connectivity is a significant drawback. The variable also shows high significance statistically.

The bilateral trade of the UAE has been shown to be influenced by diplomatic missions and consulates in Sub Saharan Africa, the model provides enough evidence with high significance that the Total Bilateral Trade of the UAE is negatively related to the number of Foreign Sub Saharan Countries Embassies and Consulates in the UAE as the coefficient is negative and equals -0.645 (p-value=0). Similarly, the variable of the number of the UAE Embassies and Consulates in Sub Saharan Africa is shown to be

negatively related to total trade as the coefficient is equal -0.733 with a p-value=0 after that is to observe the results of the dummy variables in our augmented gravity model.

Similarly, with the previous model of all countries, it is observed with a very high significance that having a common language with the UAE, i.e. Arabic as an official language, is influencing the trade flows positively (p-value=0). Therefore, having Arabic as an official language in a Sub-Saharan African Country tends to impact the Bilateral Total Trade positively. The language variable coefficient is 3.79. While it also makes sense and in line with the common understanding of the trade dynamics, and similar to the regression model in Section 3.1, it is also observed that there is an insignificant negative impact of being a landlocked Sub Saharan African country on the total bilateral trade with the UAE, as the coefficient is equal -1.02 with (p-value=0.101). Moreover, an insignificant negative impact of being an island in Sub Saharan Africa, on the total trade with the UAE has been observed (p-value=0.236). The regression model omitted the variable Border-Share due to collinearity issue.

On the legislative front, the model omitted the FTA variable due to collinearity issues in the regression model of the Sub Saharan Africa Region. However, the total bilateral trade between the UAE and Sub Saharan Africa is shown to be significantly and positively related to having an Investment Promotion and Protection Agreement (BIT/IPPA) as the coefficient is equal to 1.99 and is the second largest coefficient, with a p-value = 0.002. On the contrary, there is enough evidence to support that the Avoidance of Double Taxation on Income Agreement (DTA) is linearly related to Bilateral Total trade with sub-Saharan Africa but negatively impacts the total flow of bilateral non-oil trade between the UAE and Sub Saharan Africa (p-value=0.028).

3.1.1.2 Arab Countries Trade with the UAE

This Section examines the regression model by analysing the coefficients when the trading partners of the UAE are members of the Arab League, a multilateral organisation that its members constitute the Arab world, to estimate the results of the augmented gravity model for total trade. As observed in the results, there is enough evidence to support the validity of the model and that the model fits the data well.

There is also enough evidence that 63.6% of the variation of total trade is explained by the variation of the independent variables. The remaining 36.4% variations are attributed to other variables that may not be included in our Gravity Model. The analysis shall be on the results of the coefficients of the explanatory variables. The distance coefficient is negative but insignificant (p-value=0.118). The UAE's bilateral trade tends to increase with Arab countries which have higher GDP per Capita as the coefficient is positive and equals 0.938. The variable Yj * Yi demonstrated very high significance (p-value=0). When looking at the population variables coefficients, it is observed that there is a higher tendency to make a trade with Arab states of the higher population; thus, the variable is statistically significant (p-value=0).

Similar to previous regression models, it is also observed that Area negatively affects the total bilateral trade of the UAE with the Arab World. The larger the trading partner is in total area in square kilometres, the less the total trade value between them. It is observed that the Area is the largest negative coefficient. This effect is attributed to the vast areas in some Arab countries, and the population distribution hinders the flow of trade as connectivity is a major drawback as well as infrastructure. There might also be an element of political instability which rendered many areas inaccessible due to conflict. The variable also shows high significance statistically (-p-value=0.005).

The bilateral trade of the UAE is not influenced by diplomatic missions and consulates of Arab partner countries in the UAE; the model does not provide enough evidence that the Total Bilateral Trade of the UAE is related to the number of Arab Countries Embassies and Consulates in the UAE (p-value=0.685). Similarly, the variable of the number of UAE Embassies and Consulates in Arab Countries is insignificant thus there is no evidence that UAE Embassies and Consulates are related to the total bilateral trade with Arab Countries (p-value=0.114).

It is now moving on to observe the results of the dummy variable in our augmented gravity model. It is observed that the variable of common language with the UAE, i.e. Arabic as an official language, has been omitted from the regression model due to collinearity issues. This complies with the common principles as the variable will always have the same value across all observations, i.e. all countries have Arabic as an official first language.

Similarly, the variables landlocked, border-share and colonised have also been omitted due to collinearity issues. The omission is because those countries are similar to the UAE in these attributes and thus collinearity has been observed. Interestingly, it is observed that there is an insignificant positive impact of being an island in the Arab World, on the total trade with the United Arab Emirates (p-value=0.075). On the legislative front, there is not enough evidence that the Free Trade Agreement and the Avoidance of Double Taxation on Income Agreement (DTA) are linearly related to the total trade of the UAE with its partner Arab country (p-value=0.217 and 0.336). So, it is observed that there was a negative effect of Investment Promotion and Protection Agreement (BIT/IPPA) on the Total Trade of the UAE with the Arab states as a coefficient equals -0.381 with a significant p-value = 0.022.

3.1.1.3 Australasia: Is Distance an Issue?

First, the regression on the data was performed to estimate the results of the augmented gravity model for total trade, however this section only tests for the countries in Australasia namely Australia, New Zealand and Papua New Guinea, while the Pacific islands have been categorised in the Oceania category due to their similar characteristics and demographics and attributes.

It is observed that several variables were omitted from the regression model due to collinearity issue. The variables are Language, Border-Share, Landlocked, Island, Colonized, Free Trade Agreement and Investment Promotion and Protection Agreement (BIT). As also observed in the results, there is enough evidence to support the validity of the model and that the model fits the data well. There is also have enough evidence that 95.28% of the variation of total trade is explained by the variation of the independent variables. The remaining 4.72% variations are attributed to other variables that may not have been included in our Gravity Model. Then, is to observe the results of the coefficients of the explanatory variables.

The coefficient of Distance is positive and highly significant (29.39). This implies that the UAE tends to trade more with farther Australasian countries. Interestingly, there is enough evidence that the bilateral trade between the UAE and Australasia is negatively influenced by the variation of the GDP per Capita of both sides (p-value = 0.022). When looking at the population variables coefficients, it is observed that there is a higher tendency to make a trade with Australasian countries that have a higher population, the variable is statistically significant (p-value=0). In contrast to the previous regions, it is observed that Area positively affects the total bilateral trade of the UAE with Australasia. The larger the trading partner is in total area in square

kilometres, the more the total trade value between them. The variable also shows high significance statistically (p-value=0).

The bilateral trade of the UAE is not related to the number of diplomatic missions and consulates. There is not enough evidence the Total Bilateral Trade of the UAE is linearly related to the number of Embassies and Consulates in both the UAE and its trading partner in Australasia and vice versa (p-value=0.373 and 0.772). Next moving on to observe the results of the dummy variable in our augmented gravity model. As most of the dummy variables were omitted due to collinearity. The only value that is reported in the regression model is the Avoidance of Double Taxation on Income Agreement (DTA). Despite that, there is not enough evidence that the variable DTA is linearly related to the dependent variable of Total Trade (p-value=0.932).

3.1.1.4 Caribbean

In the case of the UAE's trade relation with the Caribbean, the same regression was conducted on the data to estimate the results of the augmented gravity model for total trade. However, it is only to test for the Caribbean countries. It is observed that several variables were omitted from the regression model due to collinearity issue. The variables are Language, BorderShare, Landlocked, Free Trade Agreement and Investment Promotion and Protection Agreement (BIT).

There is enough evidence to support the validity of the model and that the model fits the data well. There is also enough evidence that 47.96% of the variation of total trade is explained by the variation of the independent variables. The remaining 52.04% variations are attributed to other variables that may not be included in our Gravity Model. Then is to observe the results of the coefficients of the explanatory variables.

The coefficient of Distance is positive, similar to the case of Australasia, and highly significant (p-value=0.003). This implies that the UAE tends to trade more with farther Caribbean countries.

The UAE's bilateral trade tends to increase with the Caribbean countries which have higher GDP per Capita as the coefficient is positive and equals 1.79. The variable Yj * Yi demonstrated very high significance (p-value=0). When looking at the population variables coefficients, it is observed that there is a higher tendency to make a trade with Caribbean countries that have a higher population, the variable is statistically significant (p-value=0). Similar to the previous regions, there is enough evidence that the total area in a square kilometre of the countries is linearly and negatively related to the total bilateral trade between the UAE and the Caribbean countries (p-value=0).

The bilateral trade of the UAE is not influenced by diplomatic missions and consulates in the Caribbean; the model does not provide enough evidence that the Total Bilateral Trade of the UAE is related to the number of Foreign Caribbean Countries Embassies and Consulates in the UAE (p-value=0.203). Moreover, the variable of the number of UAE Embassies and Consulates in the Caribbean is also shown to be statistically insignificant (p-value=0.773) thus there is no evidence that UAE Embassies and Consulates are linearly related to the total bilateral trade with the Caribbean Countries.

Now, is to move on to observe the results of the dummy variable in our augmented gravity model and taking into consideration the ones which were omitted as previously explained. It is observed that there is an insignificant positive impact of being an island in the Caribbean, on the total trade with the UAE (p-value=0.447). While there is also enough evidence that boing ever colonised has a positive impact on the total bilateral non-oil trade between the UAE and the Caribbean (p-value=0.002). On the legislative

front, there is not enough evidence that the Avoidance of Double Taxation on Income Agreement (DTA) variable is linearly related to the dependent variable of Total Trade (p-value=0.744).

3.1.1.5 East Asia

In this subcategory of regional groupings, the results of the augmented gravity model for total trade are analysed for the countries in East Asia. As observed in the results, there is enough evidence to support the validity of the model and that the model fits the data well. There is also enough evidence that the variation of the independent variables explains 94.09% of the variation of total trade. The remaining variations (5.91%) are attributed to other variables that not to be included in our Gravity Model.

The following variables were omitted from the regression model due to collinearity issues: Language, BorderShare, and Colonized. Next is to observe the results of the coefficients of the explanatory variables. The coefficient of Distance is negative and significant (p-value=0.16). This implies that the UAE tends to trade less with more distant East Asian countries. The UAE's bilateral trade tends to increase with East Asian countries which have higher GDP per Capita as the coefficient is positive and equals 1.32. The variable Yj * Yi demonstrated very high significance (p-value=0). When looking at the population variables coefficients, it is observed that there is a higher tendency to make a trade with East Asian countries that have a higher population, the variable is statistically significant (p-value=0).

Similar to the case with some regions such as Africa and the Arab World, it is observed that Area negatively affects the total bilateral trade of the UAE with East Asia. The larger the trading partner is in total area in square kilometres, the less the total trade

value between them. It is similarly observed that Area is the largest negative coefficient. This effect is attributed likewise to the vast areas in East Asia and population distribution, which hinder the flow of trade as connectivity is a significant drawback. The variable also shows high significance statistically (p-value=0).

The bilateral trade of the UAE has been shown to be influenced by diplomatic missions and consulates of East Asian countries in the UAE, the model provides enough evidence with high significance that the Total Bilateral Trade of the UAE is positively related to the number of Foreign East Asian Countries Embassies and Consulates in the UAE (p-value=0.026). However, the variable of the number of UAE Embassies and Consulates in East Asia is shown to be statistically insignificant with a p-value=0.385. Thus there is no evidence that UAE Embassies and Consulates are linearly related to the total bilateral trade with East Asian Countries.

Now to move on to observe the results of the dummy variable in our augmented gravity model. While it also makes sense and in line with the common understanding of the trade dynamics, and similar to the regression model in section 3.1, it is observed that there is an insignificant negative impact of being a landlocked East Asian country on the total bilateral trade with the UAE (p-value=296). Similarly, there is not enough evidence that being an Island East Asian country is negatively related to the total bilateral trade between the UAE and the East Asian region (p-value=0.385).

On the legislative front, there is enough evidence that having a Free Trade Agreement is negatively related to the total bilateral trade between the UAE and that East Asian Country (p-value=0). However, the total bilateral trade between the UAE and East Asian countries is shown to be significantly and positively related to having an Investment Promotion and Protection Agreement (BIT/IPPA) as the coefficient is

equal to 1.15 and is the second largest coefficient with a p-value = 0. In contrast, there is not enough evidence to support that the Avoidance of Double Taxation on Income Agreement (DTA) is linearly related to Bilateral Total trade with sub-Saharan Africa (p-value=0.603).

3.1.1.6 Europe

This subsection is to observe the outcome of the regression analysis of the augmented gravity equation for the case of European countries. As observed in the results, there is enough evidence to support the validity of the model and that the model fits the data well. There is also enough evidence that 85.74% of the variation of total trade is explained by the variation of the independent variables. The remaining 14.26% variations are attributed to other variables that may not be included in our Gravity Model.

Then to move on to observe the results of the coefficients of the explanatory variables. The coefficient of Distance is positive but insignificant (p-value=0.968). The UAE's bilateral trade tends to increase with European countries which have higher GDP per Capita as the coefficient is positive and equals 1.525. The variable Yj* Yi demonstrated very high significance (p-value=0). When looking at the population variables coefficients, it is observed that there is a higher tendency to make a trade with European countries that have a higher population, the variable is statistically significant (p-value=0).

Similar to the case with some regions, it is observed that Area negatively affects the total bilateral trade of the UAE with Europe. The larger the trading partner is in total area in square kilometres, the less the total trade value between them. It is observed

that Area is the largest negative coefficient also similar to many other regions that were examined in this dissertation. The variable also shows high significance statistically (p-value=0).

On a diplomatic front, the bilateral trade of the UAE has been shown to be not explained by diplomatic missions and consulates in Europe, the model does not provide enough evidence that the Total Bilateral Trade of the UAE is linearly related to both the number of Foreign European Countries Embassies and Consulates in the UAE as well as the number of UAE Embassies and Consulates in Europe. The p-value for the variables EmbCon ji and EmbCon ij is 0.845 and 0.681 respectively.

Next is to move on to observe the results of the dummy variable in our augmented gravity model. First, it has been observed that the following variables were omitted from the regression model due to collinearity issues: BorderShare and Language. While it also makes sense and in line with the common understanding of the trade dynamics, and similar to the regression model in section 3.1, it is observed that there is a negative impact of being a landlocked European country on the total bilateral trade with the UAE, but there is not enough evidence to support the former due to insignificant p-value equals 0.51.

It is observed that there is an insignificant positive impact of being an island in Europe, on the total trade with the United Arab Emirates (p-value=0.314). Moreover, being previously colonised has also been shown to impact the bilateral flow of trade positively but insignificantly between the UAE and Europe (p-value=0.269). On the legislative front, it is observed that there is a positive impact (β=0.461) of having a Free Trade Agreement with European countries on the overall bilateral trade (p-value=0.007). However, the total bilateral trade between the UAE and Europe is shown

to be insignificant thus not related to having an Investment Promotion and Protection Agreement (BIT/IPPA) (p-value=134). Similarly, there is not enough evidence to support that the Avoidance of Double Taxation on Income Agreement (DTA) is linearly related to Bilateral Total trade with Europe (p-value=0.177).

3.1.1.7 Gulf Cooperation Council (GCC)

The Gulf Cooperation Council is a particular multilateral organisation that the UAE is a member of. This region has several special trades and customs arrangements as well as free trade agreements in place. Also, the demographics of the members' countries are very similar. As shown in the results, there is enough evidence to support the validity of the model and that the model fits the data well. There is also enough evidence that 91.22% of the variation of total trade is explained by the variation of the independent variables. The remaining 8.78% variations are attributed to other variables that may not be included in our Gravity Model. Next is to observe the results of the coefficients of the explanatory variables.

The diplomatic representation variable EmbCon ij which represent the number of Foreign GCC Embassies and Consulates in the UAE and the number of UAE Embassies and Consulates in the GCC countries have been both omitted from the model due to collinearity issues. Therefore, there is not enough evidence that embassies and consulates of the UAE in the Gulf Cooperation Countries are linearly related to the total bilateral trade.

In contrast, having Gulf Cooperation Countries embassies and consulates in the UAE is positively related to the total non-oil trade with high significance (p-value=0). Interestingly, there is not enough evidence that the Distance is linearly related to the

total bilateral trade between the United Arab Emirates and Gulf Cooperation Council member countries (p-value=0.298). The UAE's bilateral trade tends to increase with Gulf Cooperation Council member countries which have higher GDP per Capita as the coefficient is positive and equals 0.8. The variable Yj * Yi demonstrated statistical significance (p-value=0.018). When looking at the population variables coefficients, it is observed that there is a higher tendency to make a trade with Gulf Cooperation Council member countries that have a higher population, the variable is statistically significant (p-value=0).

Similar to the case with some other regions, it is observed that Area negatively affects the total bilateral trade of the UAE with Gulf Cooperation Council member countries. The larger the trading partner is in total area in square kilometres, the less the total trade value between them. It is observed that the Area is the largest negative coefficient. The variable also shows high significance statistically (p-value=0). After the above is to observe the results of the dummy variable in our augmented gravity model.

First, as observed, the following variables were omitted from the regression model due to collinearity issues: Language, Landlocked, Colonized, FTA, BIT and DTA. Therefore, there is not enough evidence that those variables are linearly related to the total bilateral trade between the UAE and Gulf Cooperation Council member countries. When looking at the other variables, it has been observed that there is a significant negative impact of being an island in the Gulf Cooperation Council region, on the total trade with the UAE (p-value=0).

Interestingly and in line with shared understanding of the trade dynamics globally, it is observed that sharing borders with the Gulf Cooperation Council is the most

significant coefficient that positively impacts the total bilateral trade between the United Arab Emirates and the GCC countries. The significance of this coefficient with high and equals p-value=0.019.

3.1.1.8 North America

In this section, the regression on the data to estimate the results of the augmented gravity model for total trade was conducted, to test for the countries in North America. As observed in the results, there is enough evidence to support the validity of the model and that the model fits the data well. There is also enough evidence that 94.66% of the variation of total trade is explained by the variation of the independent variables. The remaining 5.34% variations are attributed to other variables that may not be included in our Gravity Model.

Then is to move on to observe the results of the coefficients of the explanatory variables. The coefficient of Distance is negative and highly significant (-12.46). This implies that the UAE tends to trade less with more distant North American countries. The UAE's bilateral trade tends to increase with North American countries which have higher GDP per Capita as the coefficient is positive and equals 1.13. The variable Yj * Yi demonstrated very high significance (p-value=0). When looking at the population variables coefficients, it is observed that there is a higher tendency to make a trade with North American countries that have a higher population (β=1.96), the variable is statistically significant (p-value=0).

Similar to the case with some other regions, it is observed that Area negatively affects the total bilateral trade of the UAE with North America. The larger the trading partner is in total area in square kilometres, the less the total trade value between them. It is

observed that Area is the largest negative coefficient (β=-22.62). The variable also shows high significance statistically (p-value=0).

The bilateral trade of the UAE has been shown to be not explained by diplomatic missions and consulates in North America, the model does not provide enough evidence that the Total Bilateral Trade of the UAE is linearly related to both the number of Foreign North American Countries Embassies and Consulates in the United Arab Emirates as well as the number of United Arab Emirates Embassies and Consulates in North America. The p-value for the variables EmbCon ji and EmbCon ij is 0.421 and 0.197, respectively. Next is to move on to observe the results of the dummy variable in our augmented gravity model.

The following variables were omitted from the regression model due to collinearity issues: Language, BorderShare, Landlocked, Island, FTA and BIT. Therefore, there is not enough evidence that those variables are linearly related to the total bilateral trade between the UAE and North American countries. The attribute of being ever colonised has been shown to evidently and positively affect the total bilateral non-oil trade between the United Arab Emirates and the North American Countries with statistically high significance (p-value=0). However, there is not enough evidence to support that the Avoidance of Double Taxation on Income Agreement (DTA) is linearly related to Bilateral Total trade with North America (p-value=0.990).

3.1.1.9 Oceania: The Pacific Islands Trade with the UAE

For the Oceania region which mainly comprises of the small islands in the Pacific Ocean, the regression was performed on the data to estimate the results of the augmented gravity model for total trade was performed to test for the countries in

Oceania. As observed in the results, there is enough evidence to support the validity of the model and that the model fits the data well. There is also enough evidence that the variation of the independent variables explains 38.82% of the variation of total trade. The remaining 61.18% variations are attributed to other variables that may not have been included in our Gravity Model.

It is then moving on to observe the results of the coefficients of the explanatory variables. The coefficient of Distance is negative and highly significant (β=-4.53, p-value=0.016). This implies that the UAE tends to trade less with more distant Oceanic/Pacific islands countries. On the contrary to all other regions, there is not enough evidence that the variation in the UAE's total bilateral trade with Oceanic countries is explained by the variation of the GDP per Capita of both trading partners as the p-value is equal 0.607. When looking at the population variables coefficients, it has been observed that there is a higher tendency to make trade with oceanic countries that have a higher population, the variable is statistically significant (p-value=0).

Similar to the case with all countries, it has been observed that Area negatively affects the total bilateral trade of the UAE with Oceania. The larger the trading partner is in total area in square kilometres, the less the total trade value between them. It is observed that Area is the largest negative coefficient (β=-15.20). This effect is attributed mainly to the poor connectivity that poses a major drawback. The variable also shows moderate significance statistically with a p-value equal to 0.001.

The diplomatic representation variable EmbCon ij which denotes the number of UAE Embassies and Consulates in the Oceanic countries have been omitted from the model due to collinearity issues. Therefore, there is not enough evidence that the variation in the number of embassies and consulates of the UAE in Oceanic countries explains the

variation of the total bilateral trade. However, the diplomatic representation variable EmbCon ji which denotes the number of Oceanic countries Embassies and Consulates in the UAE does not show enough evidence that the variation in the number of Oceanic countries Embassies and Consulates in the UAE explains the variation the total bilateral trade between those countries and the UAE (p-value=0.666).

Subsequently is to observe the results of the dummy variable in our augmented gravity model. The following variables were omitted from the regression model due to collinearity issues: Language, BorderShare, Landlocked, Colonized, FTA and BIT. Therefore, there is not enough evidence that those variables are linearly related to the total bilateral trade between the UAE and Oceanic countries. Being an Island in Oceania and the Pacific tends to have a positive impact on the total bilateral trade between the United Arab Emirates and those countries (p-value=0.003). On the Bilateral Agreements front, there is not enough evidence to support that the Avoidance of Double Taxation on Income Agreement (DTA) is linearly related to Total Bilateral Total trade with Oceania (p-value=0.955).

3.1.1.10 South America

The regression on the data was performed to estimate the results of the augmented gravity model for the total trade for the countries in South America. As observed in the results, there is enough evidence to support the validity of the model and that the model fits the data well. There is also enough evidence that 54.02% of the variation of total trade is explained by the variation of the independent variables. The remaining 45.98% variations are attributed to other variables that may not be included in our Gravity Model.

Then is to move on to observe the results of the coefficients of the explanatory variables. The coefficient of Distance is negative and significant (β=-14.967). This implies that the UAE tends to trade less with more distant South American countries (p-value=0) as the total trade variation is evident to be explained by the variation in distance. The UAE's bilateral trade tends to increase with South American countries which have higher GDP per Capita as the coefficient is positive and equals 3.389. The variable Yj * Yi demonstrated very high significance (p-value=0). When looking at the population variables coefficients, it is observed that there is a higher tendency to make trade with South American countries that have a higher population, the variable is statistically significant (p-value=0).

On the contrary with most of the regions, although it is observed that Area negatively affects the total bilateral trade of the UAE with South American Countries (β=-7.2), there is not enough evidence that the Area size in kilometre square of the countries affects the bilateral flow of non-oil trade between the UAE and South American Countries.

The bilateral trade of the UAE has been shown to be not influenced by diplomatic missions and consulates in South America, the model does not provide enough evidence that the Total Bilateral Trade of the UAE is related to the number of UAE Embassies and Consulates in South American Countries (p-value=0.526), thus there is not enough evidence that the variation in total bilateral trade between the UAE and South American trading partners is explained by the variation in the number of embassies and consulates the UAE has in the South American Region. Similarly, the variable of the number of Foreign South American Embassies and Consulates in the UAE is shown to be statistically insignificant (p-value=0.693). Thus, there is no

evidence that the variation in the number of South American Countries Embassies and Consulates in the UAE explains the variation of the total bilateral trade with between the UAE and the same region. Next is to move on to observe the results of the dummy variable in our augmented gravity model.

The following variables were omitted from the regression model due to collinearity issues: Language, BorderShare, Island, FTA and BIT. Therefore, there is not enough evidence that those variables, explain the variation ij the total bilateral trade between the UAE and South American countries. In addition, and although the variable Landlocked was included in the regression output table of the augmented gravity equation, it is observed that the there is no evidence that being a landlocked country in South America explains the variation of the total bilateral trade between the UAE and South American countries, and this variable is not evident to be linearly related to the total bilateral trade between the UAE and the same region (p-value=0.135).

However, being ever colonised is an attribute that showed a highly significant positive relationship with the trade between the UAE and South American Countries. The model provides enough evidence that the variation in the total non-oil trade between the United Arab Emirates and South America is explained and positively related to the fact of being a previous colony (p-value=0.033). Finally, there is not enough evidence to support that the Avoidance of Double Taxation on Income Agreement (DTA) is linearly related to Bilateral Total trade with South America, and thus having the Double Taxation Agreement, or not, does not explain the variation in the trade between the UAE and the same region (p-value=0.882).

3.1.1.11 West Asia

Moving to the West Asia region, which constitutes many landlocked countries with an abundance of natural resources and is known to face connectivity problems as well as market access. At the same time, there are vast countries with gigantic economic weights in the same region such as India. Therefore, the regression on the data to estimate the results of the augmented gravity model for total trade was performed to test for the countries in West Asia. As observed in the results, there is enough evidence to support the validity of the model and that the model fits the data well. There is also enough evidence that 86.64% of the variation of total trade is explained by the variation of the independent variables. The remaining 13.36% variations may be explained by other variables that may not have been included in our Gravity Model.

Then is to move on to observe the results of the coefficients of the explanatory variables. The coefficient of Distance is negative and highly significant (p-value=0.009). This implies that the UAE tends to trade less with more distant West Asian countries. The UAE's bilateral trade tends to increase with West Asian countries which have higher GDP per Capita as the coefficient is positive and equals β=1.047. The variable Yj * Yi demonstrated very high significance (p-value=0). When looking at the population variables coefficients, it is observed that there is a higher tendency to make trade with West Asian countries that have a higher population (β=1.707), the variable is statistically significant (p-value=0).

Similar to the case with all countries, it is observed that Area negatively affects the total bilateral trade of the UAE with West Asia. The larger the trading partner is in total area in square kilometres, the less the total trade value between them. It is observed that Area is the largest negative coefficient (β=-10.439). This effect is mainly

explained by the vast areas in West Asia and population distribution that hinder the flow of trade as connectivity is a significant drawback in many parts of West Asia. The variable also shows high significance statistically (p-value=0.013).

The bilateral trade of the UAE is not influenced by diplomatic missions and consulates in West Asia; the model does not provide enough evidence that the Total Bilateral Trade of the UAE is related to the number of Foreign West Asian Countries Embassies and Consulates in the UAE (p-value=0.206). Similarly, the variable of the number of UAE Embassies and Consulates in West Asia is shown to be statistically insignificant (p-value=0.147). Thus, there is no evidence that the variation in the total bilateral trade between the UAE and West Asia is explained by the variation in the number of UAE Embassies and Consulates in the capitals and major cities.

We are moving on now to observe the results of the dummy variable in our augmented gravity model. The following variables were omitted from the regression model due to collinearity issues: Language, BorderShare, and FTA. Therefore, there is not enough evidence that these variables explain the variation in total bilateral trade between the UAE and South American countries. In addition, it is observe that the there is enough evidence that being a landlocked country in West Asia, or not, explains the variation of the total bilateral trade between the UAE and West Asian countries, and this variable is evident to be linearly related to the total bilateral trade between the UAE and the same region, and the relationship is positive. Thus, more trade is observed when the country of West Asia is landlocked (β=1.39, p-value=0.024).

Interestingly, it is observed that there is an insignificant positive impact of being an island in West Asia such as the Maldives and Sri Lanka, on the total trade with the United Arab Emirates. Thus, there is not enough evidence that the variable Island

explains the variation in the total bilateral trade between the UAE and West Asia (p-value=0.223). Moreover, it is observed from the regression of the augmented equation output that there is enough evidence that the variation in the Colonized variable explains the variation in the total bilateral trade between the UAE and West Asia (β=2.42, p-value=0.011). Thus, the UAE tends to have more bilateral trade flows with countries which have been previously colonised.

On the legislative front, the model omitted the FTA variable due to collinearity issues in the regression model of the West Asia Region. However, the total bilateral trade between the UAE and West Asia is shown to be insignificant and not related to having an Investment Promotion and Protection Agreement (BIT/IPPA) (p-value=0.364). Also, there is not enough evidence to support that the Avoidance of Double Taxation on Income Agreement (DTA) is linearly related to Bilateral Total trade with West Asia (p-value=0.118).

3.1.2 The UAE Trade Potential with the G20 Countries

This subsection examines the output of the regression on the data from the augmented gravity model for total trade for the countries that are members of the G20 group. As observed in the results, there is enough evidence to support the validity of the model and that the model fits the data well. There is also enough evidence that 78.91% of the variation of total trade is explained by the variation of the independent variables. The remaining 21.09% variations are attributed to other variables that may not be included in our Gravity Model.

Then is to move on to observe the results of the coefficients of the explanatory variables. The coefficient of Distance is negative but insignificant (p-value=0.848).

The UAE's bilateral trade tends to increase with G20 countries which have higher GDP per Capita as the coefficient is positive and equals 0.862. The variable Yj * Yi demonstrated very high significance (p-value=0). When looking at the population variables coefficients, it is observed that there is a higher tendency to make trade with G20 countries that have a higher population, the variable is statistically significant (p-value=0).

Similar to many of the regions, it is observed that Area negatively affects the total bilateral trade of the UAE with G20 countries (β=-11.60). The larger the trading partner is in total area in square kilometres, the less the total trade value between them. The coefficient also shows high significance statistically (p-value=0) which supports that the variation in the total bilateral trade between the UAE and G20 countries is explained by the variation in the total area size in kilometre square of its trading partner within the G20 countries.

The bilateral trade of the UAE has been shown to be influenced by diplomatic missions and consulates in G20 countries, the model provides enough evidence with high significance that the Total Bilateral Trade of the UAE is positively related to the number of G20 Countries Embassies and Consulates in the United Arab Emirates as the coefficient is positive and equals β=0.6 (p-value=0). Thus, there is enough evidence that the variation in total bilateral trade between the UAE and G20 trading partners is explained by the variation in the number of embassies and consulates of the G20 member countries have in the UAE. However, the variable of the number of UAE Missions, Embassies and Consulates in the G20 Countries is shown to be statistically insignificant with a p-value=0.688 thus there is no evidence that the variation in the

number of UAE Missions, Embassies and Consulates in the G20 countries explains the variation of the total bilateral trade with between the UAE and the same region.

Next is to move on to observe the results of the dummy variable in our augmented gravity model. At first, it was observed that the following variables were omitted from the regression model due to collinearity issues: BorderShare, Landlocked, and FTA. Therefore, there is not enough evidence that these variables explain the variation in the total bilateral trade between the UAE and G20 countries. Being previously a colony has been shown in the gravity model regression output to be statistically significant (p-value=0.004) and positively related to the bilateral flow of non-oil trade between the UAE and the G20 countries.

Moving on, as the variable Island was included in the regression output table of the augmented gravity equation, it is observed that there is not enough evidence that being an island country in the G20 explains the variation of the total bilateral trade between the UAE and G20 countries (p-value=0.692). Also, having a common language positively impacts the flow of bilateral non-oil trade between the UAE and the G20 countries as there is enough evidence that the variation in the language variable explains the variation on the total flow of bilateral non-oil trade (p-value=0.028).

On the legislative front, there is not enough evidence to support that the Avoidance of Double Taxation on Income Agreement (DTA) is linearly related to Bilateral Total trade with G20, and thus having the Double Taxation Agreement, or not, does not explain the variation in the trade between the UAE and the same region (p-value=0.569). Similarly, there is not enough evidence to support that having an Investment Promotion and Protection Agreement (BIT/IPPA) is linearly related to Bilateral Total trade with G20, and thus having an Investment Promotion and

Protection Agreement (BIT/IPPA) does not explain the variation in the trade between the UAE and the same region and impacts it positively (p-value=0.851).

3.2 Investment Results and Analysis

The regression on the data was conducted to estimate the results of the augmented gravity model for investment flows (See Appendix - Table 10). The Random Effect Generalized Least Square (GLS) model regression omitted 69 groups/countries due to zero flows of investments over the 18 years of 1999 till 2016. Therefore, the number of groups/countries are 126 in this regression with a total of 907 observations. There is enough evidence to support the validity of the model and that the model fits the data. There is enough evidence that 24.07% of the variation of total foreign direct investment flows – inward and outward - is explained by the variation of the independent variables. The remaining 75.93% variations are attributed to other variables that may not be included in our Gravity Model.

First, by looking at the explanatory variables results similar to the approach followed in previous chapters, the coefficient of the combined GDP - nominal is positive and highly significant (p-value=0). Therefore, there is enough evidence to support the assumption that the foreign direct investment flows inward and outward, from and to the UAE tend to be higher with countries that have higher nominal GDP. When looking at the distance variable, it is noticed to have a negative coefficient; however due to the high p-value=0.514, there is not enough evidence that the variation in distance affects the total flows of the foreign direct investments.

When examining the population variable coefficients, it is also observed that there is a higher tendency to have more foreign direct investment flows inward and outward

when the UAE's and its partner's population are higher, this is evident as the significance is high (p-value=0). This may be attributed to the growth in demand by the consumers on one end, which affects the investment appetite of the investors in their projected financial flows and other due diligence exercises.

On the contrary to the population variable, it is observed that Area negatively affects the total foreign direct investment flows from and to the UAE. The larger the other country is in total area in square kilometres, the less the total flow of foreign direct investments between the UAE and the partner as mentioned above country. The variable also shows moderate significance statistically with a p-value=0.039.

The total flow of the Foreign Direct Investments is hypothesized to be influenced by the existence of the foreign missions as well as UAE missions abroad, however in our model and given the data that was examined, there is not enough evidence to support that the existence of foreign missions in the UAE and the existence of UAE missions abroad, affect the variation in the total foreign direct investments outward and inward into and from the UAE. It is observed that the p-values of both variables that correspond to the existence of UAE missions and Foreign missions to be 0.420 and 0.778 respectively.

Now is to move on to observe the results of the dummy variable in our augmented gravity model for the investment flows. The first variable observed is the landlocked variable. There is not enough evidence that for a country is landlocked, the attribute therefore does not explain the variation in the total foreign direct investments from and to the UAE from the country (p-value=0.313). Similar to the previous variable, the countries attribute of being an island or not is statistically insignificant in our model and thus has no linear relationship with the total foreign direct investment flows, i.e.

the variation in the total foreign direct investment flows is not explained by the variation in the island variable (p-value=0.774).

As shown in the same table referenced above, it is observed that there is a very high significance of having a common language with the UAE, i.e. Arabic as an official language, in influencing the flows of foreign direct investments both ways positively. Therefore, having Arabic as an official language in a country tends to increase the total Foreign Direct investment flows between the UAE and the other Arabic speaking country (p-value=0.003).

In contrast, there is not enough evidence to support that the foreign direct investment flows both ways between the UAE and other countries are influenced by having borders, i.e. neighbouring the UAE (p-value=0.347). In the case of a country being ever colonized, the results obtained from the augmented gravity model for investment show that there is not enough evidence that the variation in the total foreign direct investment flows both ways between the UAE and the world is explained by the other country being colonized historically or not as the p-value is equal to 0.504.

On the legislative front, the model revealed an insignificant relationship between FTA's and bilateral flows of foreign direct investments inward and outward of the UAE (p-value=0.612). Also, bilateral flows of foreign direct investments inward and outward of the UAE is shown to be non-linearly related to having an Investment Promotion and Protection Agreement (BIT/IPPA) (p-value=0.407). However, the Avoidance of Double Taxation on Income Agreement (DTA) is shown also to be not statistically significant to explain the variation of the total bilateral flows of foreign direct investments inward and outward of the UAE (p-value=0.139). Therefore, there is not enough evidence that having the Avoidance of Double Taxation on Income

Agreement (DTA) is affecting the total bilateral flows of foreign direct investments inward and outward of the UAE.

In the following sections, the effects of the explanatory variables and the dummy variables on the total foreign direct investments flow from and to the UAE are tested in relation with the regions of the world, similar to the approach followed in the previous chapter on trade analysis.

3.2.1 Analysing the UAE Investments per Geographic Regions

In an attempt to examine the effects of the economic diplomacy tools on the total investments geographically, the 126 countries were divided to their respective regions as per the United Nations standards, the World Bank Standard. The current classification used by the Ministry of Foreign Affairs in the UAE was also taken into consideration. The gravity model was examined to observe the effects of the variation in the independent variables on the dependent variable namely Total Investment using the Random Effects GLS model. Next is to look at the regions results in alphabetical order. A graphical representation of the results for the investment flows model is shown in Appendix - Figure 6 for the factors that boost the bilateral foreign direct investments flows and Appendix - Figure 7 for the factors that reduce the bilateral foreign direct investments flows.

3.2.1.1 Investment Analysis of the UAE with Sub-Saharan Africa

In continuation to the above analysis on the augmented gravity model for investments, moving on now to perform the regression on the data to estimate the results of the augmented gravity model for investment flows per region, and in this Section, the flows of foreign direct investments both ways between the UAE and Sub Saharan

African countries have been examined. The results are of 28 countries in Africa included in our Random Effect GLS model regression.

There is enough evidence to support the validity of the model and that the model fits the data. There is also enough evidence that 14.89% of the variation of total foreign direct investment flows – inward and outward – between the UAE and Sub Saharan Africa is explained by the variation of the independent variables. The remaining 85.11% variations are attributed to other variables that may not be included in our Gravity Model.

First, by looking at the explanatory variables results similar to the approach followed in previous chapters. The regression results of the combined GDP - nominal variable have been observed, and accordingly it is concluded that there is not enough evidence to support the assumption that the foreign direct investment flows inward and outward, from and to the UAE tend to be higher with Sub Saharan African countries that have higher nominal GDP (p-value=0.156). Therefore, the variation in the total foreign direct investments flows is not explained by the variation of both countries GDP.

When looking at the distance variable, it is noticed that there is a negative coefficient, however, due to the high p-value=0.541, there is not enough evidence that the variation in distance affects the total flows of the foreign direct investments from and to the UAE from Sub Saharan Africa. Also, and when examining the population variable coefficients, there is not enough evidence that the total foreign direct investment flows inward and outward when the UAE's and its partner's population are not related to the variation in the population size of both countries (p-value=0.130). Similar to the population variable, it is observed that Area seems not to have a linear relationship with the total foreign direct investment flows from and to the UAE. There is not

enough evidence that the variation in the total foreign direct investment flows from and to the UAE is explained by the variation in both countries total area in square kilometres. The variable is statistically insignificant (p-value=0.748).

The total flow of the Foreign Direct Investments is hypothesized to be influenced by the existence of the foreign missions as well as UAE missions abroad, however in our model and given the data examined, there is not enough evidence to support that the existence of foreign missions in the UAE and the existence of UAE missions abroad, affect the variation in the total foreign direct investments outward and inward into and from the UAE. It is observed that the p-values of both variables that correspond to the existence of UAE missions and Foreign missions to be 0.396 and 0.911 respectively.

We are moving on not to observe the results of the dummy variable in our augmented gravity model for the investment flows. The first variable observed is the landlocked variable. There is not enough evidence that for a Sub Saharan African country being landlocked, explains the variation in the total foreign direct investments from and to the UAE from Sub-Saharan Africa (p-value=0.071). The Sub-Saharan African countries attribute of being an island or not is statistically insignificant in our model and thus has no linear relationship with the total foreign direct investment flows, i.e. the variation in the total foreign direct investment flows is not explained by the variation in the island variable (p-value=0.836).

As shown in the same table referenced above, it is observed that there is insignificance of having a common language with the UAE, i.e. Arabic as an official language, in influencing the flows of foreign direct investments both ways (p-value=0.173). Therefore, there is not enough evidence that having Arabic as an official language in a country is linearly related to the total Foreign Direct investment flows between the

UAE and the other Arabic speaking country in Sub-Saharan Africa. It is also observed that in the regression output, the variables BorderShare, Colonised and FTA have been omitted due to collinearity issues. Therefore, they have been excluded from the model for Sub Saharan Africa.

On the legislative front, the regression output indicated that the bilateral total foreign direct investment flows to be non-linearly related to having an Investment Promotion and Protection Agreement (BIT/IPPA) and the Avoidance of Double Taxation on income Agreement (DTA) as the p-values are equal to 0.433 and 0.435 respectively. Therefore, there is not enough evidence that the variation in having the Investment Promotion and Protection Agreement (BIT/IPPA) and the Avoidance of Double Taxation on Income Agreement (DTA) explains the variation in the total bilateral flows of foreign direct investments inward and outward of the UAE with Sub Saharan Africa.

3.2.1.2 Investment Analysis of the UAE with the Arab Region

Next, the regression was performed on the data to estimate the results of the augmented gravity model for investment flows between the UAE and Arab countries that are members of the Arab League of nations. We have enough evidence to support the validity of the model and that the model fits the data. We also have enough evidence that 14.33% of the variation of total foreign direct investment flows – inward and outward – between the UAE and the Arab Countries is explained by the variation of the independent variables. The remaining 85.67% variations are attributed to other variables that may not be included in our Gravity Model.

We shall begin by looking at the explanatory variables results similar to the approach we followed in previous chapters. We first observe the regression results of the combined GDP - nominal variable, and accordingly, we conclude that we have enough evidence to support the assumption that the foreign direct investment flows inward and outward, from and to the UAE tend to be higher with Arab countries that have higher nominal GDP (p-value=0.011). Therefore, the variation in the total foreign direct investments flows is explained by the variation of both countries GDP.

When looking at the distance variable, we notice a negative coefficient; however due to the high p-value=0.661, we do not have enough evidence that the variation in distance affects the total flows of the foreign direct investments between the UAE and Arab Countries. Also, and when examining the population variable coefficients, we conclude that we do not have enough evidence that the variation in the total bilateral flows of foreign direct investments is not explained by the variation in the population of the UAE and the Arab countries (p-value=0.164). On the same lines, we also conclude that we do not have enough evidence that the variation in the total bilateral flows of foreign direct investments between the UAE and the Arab countries is not explained by the variation of the total area in square kilometres of the UAE and the Arab countries (p-value=0.669).

The total flow of the Foreign Direct Investments is hypothesized to be influenced by the existence of the foreign missions as well as UAE missions abroad, however in our model and given the data we examined, we do not have enough evidence to support that the existence of foreign missions in the UAE affect the variation in the total foreign direct investments outward and inward into and from the UAE. We observed the p-value of the variable above that corresponds to the existence of Foreign missions in

the UAE to be 0.139. Also, the variable EmbCon $_{ij}$ which is attributed to the number of UAE missions in a specific country at a specific time does not explain the variation in the total bilateral non-oil trade between the UAE and the Arab countries (p-value=0.610). We now move on to observe the results of the dummy variable in our augmented gravity model for the investment flows. As shown in the regression model output, we observed that several other variables had been omitted from the model due to collinearity issues and they are as follows: Landlocked, Island, Language, BorderShare, and Colonised.

On the legislative front, the model revealed an insignificant relationship between FTA's and bilateral flows of foreign direct investments inward and outward of the UAE (p-value=0.945). Also, bilateral flows of foreign direct investments inward and outward of the UAE is shown to be non-linearly related to having an Investment Promotion and Protection Agreement (BIT/IPPA) and the Avoidance of Double Taxation on Income Agreement (DTA) as the p-values are equal to 0.338 and 0.388 respectively. We, therefore, do not have enough evidence that having the variation in the Investment Promotion and Protection Agreement (BIT/IPPA) and the Avoidance of Double Taxation on Income Agreement (DTA) variables explain the variation in the total flow of foreign direct investments between the UAE and the Arab countries.

3.2.1.3 Investment Analysis of the UAE with Australasia

In this subsection, the regression was performed on the data to estimate the results of the augmented gravity model for investment flows with Australasia. We have enough evidence to support the validity of the model and that the model fits the data. We also have enough evidence that 71.97% of the variation of total foreign direct investment flows – inward and outward – between the UAE and Australasia is explained by the

variation of the independent variables. The remaining 28.03% variations are attributed to other variables that may not be included in our Gravity Model. We shall begin by looking at the explanatory variables results similar to the approach we followed in previous chapters.

As the significance of the combined GDP – nominal variable is not evident in our model, with a p-value=0.287, we do not have enough evidence to support the assumption that the foreign direct investment flows inward and outward, from and to the UAE tend to be higher with countries that have higher nominal GDP. Thus, the variation in the total flows of foreign direct investment between the UAE and Australasia is not explained by the variation in the gross domestic product of both the UAE and Australasia countries.

Similarly, When looking at the distance variable, we notice that we do not have enough evidence that that variation in foreign direct investment flows between the UAE and Australasia is explained by the variation in the distance in kilometres (p-value=583. Also, and when examining the population variable coefficients, we assume a higher tendency to have more foreign direct investment flows inward and outward when the UAE's and its partner's population are higher, however, we do not have enough evidence to support this assumption as the p-value=0.216. We also observed that the area in square kilometres does not explain the variation in bilateral total non-oil trade between the UAE and Australasia (p-value=0.285).

As discussed in previous chapters that the total flow of the Foreign Direct Investments is hypothesized to be influenced by the existence of the foreign missions as well as UAE missions abroad, however in our model and given the data we examined, we do not have enough evidence to support that the existence of foreign missions in the UAE

and the existence of UAE missions abroad, affect the variation in the total foreign direct investments outward and inward into and from the UAE. We observed the p-values of both variables that correspond to the existence of UAE missions and Foreign missions to be 0.560 and 0.828 respectively.

We now move on to observe the results of the dummy variable in our augmented gravity model for the investment flows. We observed from the regression results that the following variables were omitted due to collinearity issues. The variables are Landlocked, Island, Language, BorderShare, Colonized, Free Trade Agreements (FTA), and the Investment Promotion and Protection Agreement (BIT). Although on the legislative front, the model revealed an insignificant relationship between the Avoidance of Double Taxation on Income Agreement (DTA) and bilateral flows of foreign direct investments inward and outward of the UAE (p-value=0.233). Therefore, we do not have enough evidence that the variation in the Avoidance of Double Taxation on Income Agreement (DTA) variable explains the variation of the total bilateral flows of foreign direct investments inward and outward of the UAE with Australasia.

3.2.1.4 Investment Analysis of the UAE with the Caribbean

In furtherance to previous sections, we move on now to perform the regression on the data to estimate the results of the augmented gravity model for investment flows between the UAE and the Caribbean countries. The regression results have been omitted mostly due to collinearity, however, and because the number of observations is only 6, which indicate that throughout the past 18 years, the investment flows with the Caribbean have been very minimal as shown in our data gathered for the years from 1999 till 2016. Therefore, we do not have enough observations on this specific

region to obtain the regression analysis output as shown in the table above and obtain the results to check our assumptions for each of the model variables.

3.2.1.5 Investment Analysis of the UAE with East Asia

When looking at the East Asia regression output, we have enough evidence to support the validity of the model and that the model fits the data. We also have enough evidence that 19.85% of the variation of total foreign direct investment flows – inward and outward – between the UAE and East Asian countries are explained by the variation of the independent variables. The remaining 80.15% of the variations are attributed to other variables that may not be included in our augmented Gravity Model for foreign direct investments. We shall begin by looking at the explanatory variables results similar to the approach we followed in previous chapters.

The coefficient of the combined GDP - nominal is positive and significant (p-value=0.017). Therefore, we have enough evidence to support the assumption that the foreign direct investment flows inward and outward, from and to the UAE tend to be higher with countries that have higher nominal GDP. In other words, we have enough evidence that the variation in the total foreign direct investment flows between the UAE and East Asia is explained by the variation of the combined GDP of both countries over the past 18 years.

When looking at the distance variable, we notice a positive coefficient; however, due to the high p-value=0.399, we do not have enough evidence that the variation in distance explains the variations in the total flows of the foreign direct investments between the UAE and East Asian countries. Also, and when examining the population variable, we assume a higher tendency to have more foreign direct investment flows

inward and outward when the UAE's and its partner's population are higher, however, as the p-value is equal 0.095, we do not have enough evidence to support the former assumption. Thus, we also do not have enough evidence that the variation in the total foreign direct investment flows between the UAE and East Asia countries is explained by the variation in the combined population of both partner nations over the 18 years from 2009 till 2016.

On the contrary to the population variable, we assume that Area positively affects the total foreign direct investment flows from and to the UAE. The assumption is that the larger the other country is in total area in square kilometres, the more the total flow of foreign direct investments between the UAE and the partner as mentioned above country. However and due to the fact that the variable is shown to be insignificant in our regression output for East Asia (p-value=0.134), we conclude that we do not have enough evidence that the variation in the total foreign direct investment flows between the UAE and East Asia countries is explained by the variation in the combined Areas in square kilometres of both partner nations over the 18 years from 2009 till 2016.

The total flow of the Foreign Direct Investments is hypothesized to be influenced by the existence of the foreign missions as well as UAE missions abroad, however in our model and given the data we examined, we do not have enough evidence to support that the existence of foreign missions in the UAE and the existence of UAE missions abroad, affect the variation in the total foreign direct investments outward and inward between the UAE and East Asian countries. We observed the p-values of both variables that correspond to the existence of UAE missions and Foreign missions to be 0.236 and 0.390 respectively.

We now move on to observe the results of the dummy variable in our augmented gravity model for the investment flows. The first variable we observed is the landlocked variable. We do not have enough evidence that for a country is landlocked; the attribute, therefore, does not explain the variation in the total foreign direct investments from and to the UAE from the country. We observed a p-value=0.633. Similar to the previous variable, the East Asian countries attribute of being an island or not is statistically insignificant in our model and thus has no linear relationship with the total foreign direct investment flows, i.e. the variation in the total foreign direct investment flows is not explained by the variation in the island variable (p-value=0.436).

As discussed in the previous chapters, we assumed that having a common language with the UAE, i.e. Arabic as an official language is influencing the flows of foreign direct investments both ways positively. Therefore, the assumption is that having Arabic as an official language in a country tends to increase the total Foreign Direct investment flows between the UAE and the other Arabic speaking country, however, in the case of East Asia, the variable has been omitted due to collinearity issues.

Similarly, and in line with the prevailing investment principles, we assumed that the foreign direct investment flows both ways between the UAE and other countries is positively influenced by having borders, i.e. neighbouring the UAE however in the case of East Asia, the variable has been omitted due to collinearity issues. In the case of that trading country being ever colonised, the results obtained from the augmented gravity model show that we do not have enough evidence that the variation in the total foreign direct investment flows both ways between the UAE and the world is explained by the other country being colonised historically (p-value=0.272).

On the legislative front, the model revealed an insignificant relationship between the Avoidance of Double Taxation on Income Agreement (DTA) and bilateral flows of foreign direct investments inward and outward between the UAE and East Asia (p-value=0.464). In contrast, the bilateral flows of foreign direct investments inward and outward of the UAE is shown to be negatively related to having an Investment Promotion and Protection Agreement (BIT/IPPA) (p-value=0.04). Therefore, the variation in the total flow of foreign direct investments between the UAE and East Asian countries is explained by the variation in the Investment Promotion and Protection Agreement (BIT/IPPA) variable. However, as the coefficient of the Investment Promotion and Protection Agreement (BIT/IPPA) variable is negative, we conclude that having a BIT with East Asian countries negatively affects the flows of foreign direct investments both ways, which contradicts with our assumptions.

Similarly, the Free Trade Agreement variable is shown to be statistically significant to explain the variation of the total bilateral flows of foreign direct investments inward and outward between the UAE and East Asian countries. FTA is positively related to the total flows of foreign direct investments between the UAE and East Asian countries (p-value=0.027). We, therefore, have enough evidence that having the Free Trade Agreement (FTA) is positively affecting the total bilateral flows of foreign direct investments inward and outward between the UAE and East Asia.

3.2.1.6 Investment Analysis of the UAE with Europe

As Europe regression output for the investment gravity model is observed, we have enough evidence to support the validity of the model and that the model fits the data. We also have enough evidence that 40.24% of the variation of total foreign direct investment flows – inward and outward – between the UAE and Europe is explained

by the variation of the independent variables. The remaining 59.76% variations are attributed to other variables that may not be included in our Gravity Model.

We shall begin by looking at the explanatory variables results similar to the approach we followed in previous chapters. The coefficient of the combined GDP - nominal is insignificant (p-value=0.479). Therefore, we do not have enough evidence to support the assumption that the foreign direct investment flows inward and outward, from and to the UAE tend to be higher when the nominal gross domestic product of both the UAE and the other European countries is higher.

When looking at the distance variable, we notice a positive coefficient; however, due to the high p-value=0.276, we do not have enough evidence that the variation in distance explains the variation in the total flows of the foreign direct investments between the UAE and Europe. Also, and when examining the population variable, we assumed a higher tendency to have more foreign direct investment flows inward and outward when the UAE's and its partner's population are higher, however, as the p-value is equal 0.402, we do not have enough evidence to support the former assumption. Thus, we also do not have enough evidence that the variation in the total foreign direct investment flows between the UAE and European countries are explained by the variation in the combined population of both partner nations over the 18 years from 2009 till 2016.

Similar to the population variable, we observed that Area in square kilometres does not affect the total foreign direct investment flows from and to the UAE (p-value=0.188). Therefore, we do not have enough evidence that the variation in the total flow of foreign direct investments between the UAE and Europe is explained by the variation in the Area in square kilometres of the UAE and the European country.

The total flow of Foreign Direct Investments is hypothesised to be influenced by the existence of foreign missions as well as UAE missions abroad. Therefore, in our model and given the data we examined, we do have enough evidence to support that the existence of foreign missions in the UAE (p-value=0.133), affects the variation in the total foreign direct investments outward and inward between the UAE and Europe. On the same lines, we observed that the existence of UAE missions in Europe does not affect nor explain the variation in the flow of the foreign direct investments between the UAE and Europe (p-value=0.523).

We now move on to observe the results of the dummy variable in our augmented gravity model for the investment flows. We do not have enough evidence that a country is landlocked. The attribute, therefore, does not explain the variation in the total foreign direct investments between the UAE and Europe. We observed a p-value=0.949. The countries attribute of being an island or not is statistically insignificant in our model and thus does not have a linear relation with the total foreign direct investment flows between the UAE and Europe, i.e. the variation in the total foreign direct investment flows is not explained by the variation in the island variable (p-value=0.369).

As shown in the same Table referenced above, we assumed that having a common language with the UAE, i.e. Arabic as an official language, is influencing the flows of foreign direct investments both ways positively. Therefore, the assumption is that having Arabic as an official language in a country tends to increase the total Foreign Direct investment flows between the UAE and the other Arabic speaking country. However, in the regression model, the variable has been omitted due to collinearity as no European country has Arabic as an official first language.

Also, as we assumed that the foreign direct investment flows both ways between the UAE and other countries is positively influenced by having borders, i.e. neighbouring the UAE. The variable has been omitted due to collinearity as not European country shares borders with the UAE. In the case of a European country being ever colonized, the results obtained from the augmented gravity model show that we do not have enough evidence that the variation in the total foreign direct investment flows both ways between the UAE and the world is explained by the other European country being colonized historically or not as the p-value is equal 0.712.

On the legislative front, the model revealed an insignificant relationship between FTA's and bilateral flows of foreign direct investments inward and outward of the UAE (p-value=0.858). Also, bilateral flows of foreign direct investments inward and outward of the UAE is shown to be not related to having an Investment Promotion and Protection Agreement (BIT/IPPA) (p-value=0.597). Similarly, the Avoidance of Double Taxation on Income Agreement (DTA) is shown to be statistically insignificant to explain the variation of the total bilateral flows of foreign direct investments inward and outward of the UAE (p-value=0.507). We, therefore, do not have enough evidence that having the Avoidance of Double Taxation on Income Agreement (DTA) is affecting the total bilateral flows of foreign direct investments inward and outward between the UAE and Europe.

3.2.1.7 Investment Analysis of the UAE with the Gulf Cooperation Council

In this subsection of the results chapter, the regression was performed on the data to estimate the results of the augmented gravity model for investment flows. We have enough evidence to support the validity of the model and that the model fits the data. We also have enough evidence that the variation of the independent variables explains

48.01% of the variation of total foreign direct investment flows - inward and outward - between the UAE and members of the GCC. The remaining 51.99% variations are attributed to other variables that may not be included in our Gravity Model. We shall begin by looking at the explanatory variables results similar to the approach we followed in previous chapters.

The coefficient of the combined GDP - nominal is positive and highly significant (p-value=0.001). Therefore we have enough evidence to support the assumption that the foreign direct investment flows inward and outward, between the UAE and members of the Gulf Cooperation Council tend to be higher with countries that have higher nominal GDP and also increases as the combined GDP increases.

When looking at the distance variable, we notice a positive coefficient; however, due to the high p-value=0.052, we do not have enough evidence that the variation in distance affects the total flows of the foreign direct investments between the UAE and members of the Gulf Cooperation Council. Also, and when examining the population variable, we assumed a higher tendency to have more foreign direct investment flows inward and outward when the UAE's and its partner's population are higher, however, as the (p-value=0.095), we do not have enough evidence to support the former assumption. Thus, we also do not have enough evidence that the variation in the total foreign direct investment flows between the UAE and members of the Gulf Cooperation Council is explained by the variation in the combined population of both partner nations over the 18 years from 2009 till 2016.

On the contrary to the population variable, we assume that Area positively affects the total foreign direct investment flows from and to the UAE. In other words, the larger the other country is in total area in square kilometres, the less the total flow of foreign

direct investments between the UAE and the partner above country. However, the variable is insignificant statistically (p-value=0.191). Thus, we also do not have enough evidence that the variation in the total foreign direct investment flows between the UAE and members of the Gulf Cooperation Council is explained by the variation in the Areas in square kilometres of both partner nations.

The total flow of the Foreign Direct Investments is hypothesized to be influenced by the existence of the foreign missions as well as UAE missions abroad, however in our model and given the data we examined, we do not have enough evidence to support that the existence of foreign missions in the UAE and the existence of UAE missions abroad, affect the variation in the total foreign direct investments outward and inward into and from the UAE. We observed the p-values of the variable that correspond to the existence of GCC missions in the UAE to be 0.567. However, the variable that corresponds to the existence of UAE missions in GCC countries has been omitted due to collinearity issues.

We now move on to observe the results of the dummy variable in our augmented gravity model for the investment flows. The landlocked variable has been omitted from the regression model of foreign direct investment flows between the United Arab Emirates and the members of the Gulf Cooperation Council due to collinearity issues. When observing the countries attribute of being an island or not, we observe an insignificant (p-value=0.395) which leads us to conclude that the variation in foreign direct investment flows between the United Arab Emirates and the members of the Gulf Cooperation Council due to collinearity issues is not explained by the variation in the Island variable.

As shown in previous chapters, we assumed that having a common language with the UAE, i.e. Arabic as an official language is influencing the flows of foreign direct investments both ways positively. Therefore, having Arabic as an official language in a country tends to increase the total Foreign Direct investment flows between the UAE and the other Arabic speaking country. However, this assumption cannot be examined in the case of the Gulf Cooperation Council countries as the variable have been omitted due to collinearity since all members of the Gulf Cooperation Council have Arabic as their first official language. Also, from the regression output shown in the table referenced above, we do not have enough evidence to support that the foreign direct investment flows both ways between the UAE and members of the Gulf Cooperation Council is explained by having shared borders, i.e. neighbouring the UAE as the p-value is equal 0.070. In the case of the Gulf Cooperation Council country being ever colonised, the results obtained from the augmented gravity model show that the variable has been omitted due to collinearity issues.

On the legislative front, the model revealed the variables of the Free Trade Agreement, the Investment Promotion and Protection Agreement (BIT/IPPA), and the Avoidance of Double Taxation on Income Agreement (DTA) has been omitted due to collinearity. The Gulf Cooperation Council members are already within a Free Trade Agreement and have signed and also ratified both the Investment Promotion and Protection Agreement (BIT/IPPA), and the Avoidance of Double Taxation on Income Agreement (DTA).

3.2.1.8 Investment Analysis of the UAE with North America

Moving on now to perform the regression on the data to estimate the results of the augmented gravity model for investment flows. We have enough evidence to support

the validity of the model and that the model fits the data. We also have enough evidence that 68.05% of the variation of total foreign direct investment flows – inward and outward – between the UAE and the variation of the independent variables explains North American countries. The remaining 31.95% variations are attributed to other variables that may not be included in our Gravity Model. We shall begin by looking at the explanatory variables results similar to the approach we followed in previous chapters.

As shown in the regression as mentioned above table, the combined GDP – nominal variable is insignificant (p-value=0.198). Therefore, we do not have enough evidence to support the assumption that the foreign direct investment flows inward and outward, from and to the UAE tend to be higher with countries that have higher nominal GDP. In other terms, the variation in the total flows of foreign direct investments between the UAE and North American countries is not explained by the variation of the gross domestic product in nominal terms of the UAE and North American countries over the 18 years from 2009 till 2016.

When looking at the distance variable, we notice a positive coefficient; however, due to the high p-value=0.738, we do not have enough evidence that the variation in distance affects the total flows of the foreign direct investments between the UAE and North America region. Also, and when examining the population variable coefficients, we assumed a higher tendency to have more foreign direct investment flows inward and outward when the UAE's or North American countries population are higher, however, as the p-value is high and equals 0.465. We conclude that we do not have enough evidence that the variation in the total foreign direct investments flows between the UAE and North America region is explained by the variation in the

populations of the UAE and the North American countries over the 18 years from 2009 till 2016.

Similar to the population variable, as an assumption that Area positively affects the total foreign direct investment flows from and to the UAE. The larger the other country is in total area in square kilometres, the more the total flow of foreign direct investments between the UAE and the partner mentioned above country. However, the variable also shows insignificance statistically with a p-value=0.616.

The total flow of the Foreign Direct Investments is hypothesized to be influenced by the existence of the foreign missions as well as UAE missions abroad, however in our model and given the data we examined, we do not have enough evidence to support that the existence of North American countries missions in the UAE and the existence of UAE missions in North America, affect the variation in the total foreign direct investments outward and inward into and from the UAE. We observed the p-values of both variables that correspond to the existence of UAE missions and North American missions to be 0.615 and 0.614 respectively.

We now move on to observe the results of the dummy variable in our augmented gravity model for the investment flows. The first variable we observed is the landlocked variable. The variable has been omitted from the regression output table due to collinearity issues. Similar to the previous variable, the countries attribute of being an island or not has also been omitted from the regression output table due to collinearity issues.

Also, and line with the common investment principles, we assumed that the foreign direct investment flows both ways between the UAE and other countries are positively

influenced by having borders, i.e. neighbouring the UAE. However, in the case of North America and since the UAE does not share any borders with the countries in this region, we observed that the variable BorderShare had been omitted from the regression output table due to collinearity issues. In the case of that North American country being ever colonized, the results obtained from the augmented gravity model show that being ever colonised is not related to the variation in the total foreign direct investment flows between the UAE and North America (p-value=0.695).

On the legislative front, the model revealed an insignificant relationship between the Avoidance of Double Taxation on Income Agreement (DTA) and bilateral flows of foreign direct investments inward and outward between the UAE and North America region (p-value=0.109). In addition, bilateral flows of foreign direct investments inward and outward of the UAE relationship with the signing and ratification of the Investment Promotion and Protection Agreement (BIT/IPPA) and the Free Trade Agreement (FTA) could not be examined as the both variables have been omitted from the regression output table due to collinearity issues. We, therefore, are not able to comment on their effects on the flow of foreign direct investments between the UAE and North America region.

3.2.1.9 Investment Analysis of the UAE with Oceania – Pacific Islands

As we performed the regression analysis of the augmented gravity model for investment flows correctly for the Pacific islands, the statistics software returned a result stating that the model has insufficient observations on investments between the UAE and Oceania – the Pacific Islands over the 18 years from 1999 until 2016. Therefore, we could not examine the effects of the explanatory variables nor the

dummy variables on the variation of the total foreign direct investment flows between the UAE and the Pacific region.

3.2.1.10 Investment Analysis of the UAE with South America

In the case of the regression output for the augmented gravity model for investment flows between the UAE and South America Region. We have enough evidence to support the validity of the model and that the model fits the data. We also have enough evidence that 45.51% of the variation of total foreign direct investment flows – inward and outward – between the UAE and the variation of the independent variables explains the South America Region. The remaining 54.49% variations are attributed to other variables that may not be included in our Gravity Model.

We shall begin by looking at the explanatory variables results similar to the approach we followed in previous chapters. The coefficient of the combined GDP - nominal is positive and but insignificant (p-value=0.507). Therefore, we do not have enough evidence to support the assumption that the foreign direct investment flows inward and outward, from and to the UAE tend to be higher with countries that have higher nominal GDP. In other terms, we do not have enough evidence that the variation in the total flow of foreign direct investments between the UAE and South America Region is explained by the variation in the combined gross domestic product in nominal terms of the countries in both sides over the 18 years from 1999 until 2016.

When looking at the distance variable, we notice a negative coefficient; however, due to the high p-value=0.445, we do not have enough evidence that the variation in distance affects the total flows of the foreign direct investments between the UAE and South America region. Also, and when examining the population variable coefficients,

we assumed a higher tendency previously to have more foreign direct investment flows inward and outward when the UAE's and its partner's population are higher. However, when we observed the regression output table of the augmented gravity model for investments for testing the hypotheses between the UAE and South America region, we conclude that we do not have enough evidence that the variation in the total flow of foreign direct investments between the UAE and South America region is explained by the variation in the population of both sides over the 18 years period from 1999 until 2016 (p-value=0.157).

On the contrary to the population variable, we observed that Area is not related to the total foreign direct investment flows from and to the UAE (p-value=0.157). Therefore, we do not have enough evidence that the variation in the total foreign direct investment flows between the UAE and South America Region is explained by the variation of the total area in square kilometres. The total flow of the Foreign Direct Investments is hypothesized to be influenced by the existence of the foreign missions as well as UAE missions abroad, however in our model and given the data we examined, we have enough evidence to support that the existence of South American missions in the UAE negatively affects the variation in the total foreign direct investments outward and inward between the UAE and South America region (p-value=0.05). However, we observed the p-value of the variable that corresponds to the existence of UAE missions in South American countries to be 0.920. Thus we ruled out that the variable as insignificant.

We now move on to observe the results of the dummy variable in our augmented gravity model for the investment flows. The first variable we observed is the landlocked variable. We have enough evidence that for a South American country is

landlocked, explains the variation in the total foreign direct investments between the UAE and South America Region (p-value=0.045). Due to the negative coefficient, we conclude that being a landlocked country in South America hinders the flow of foreign direct investments between it and the UAE. After that, we examined the South American countries attribute of being an island or not. However, the regression model output table omitted the variable from the table due to collinearity issues.

As discussed before, we assume a very high significance of having a common language with the UAE, i.e. Arabic as an official language, in influencing the flows of foreign direct investments both ways positively. Therefore, having Arabic as an official language in a country tends to increase the total Foreign Direct investment flows between the UAE and the other Arabic speaking country. However, in the regression output table of total foreign direct investments between the UAE and South America region, the variable has been omitted from the regression output table due to collinearity issues.

Also, and line with the common investment principles, we assumed that the foreign direct investment flows both ways between the UAE and other countries are positively influenced by having borders, i.e. neighbouring the UAE. However, in the case of South America and since the UAE does not share any borders with the countries in this region, we observed that the variable BorderShare had been omitted from the regression output table due to collinearity issues. In the case of that South American country being ever colonized, the results obtained from the augmented gravity model show that the variable does not explain the variation in the total flow of foreign direct investments between the region and the UAE (p-value=0.250).

On the legislative front, the model revealed that the variables corresponding to the signing and ratification of the Avoidance of Double Taxation on Income Agreement (DTA), the Investment Promotion and Protection Agreement (BIT/IPPA) and the Free Trade Agreement (FTA) could not be examined as these variables have been omitted from the regression output table due to collinearity issues. We, therefore, are not able to comment on their effects on the flow of foreign direct investments between the UAE and South America region.

3.2.1.11 Investment Analysis of the UAE with West Asia

Through observing the results of the augmented gravity model for investment flows, we have enough evidence to support the validity of the model and that the model fits the data. We also have enough evidence that the variation of the independent variables explains that 35.06% of the variation of total foreign direct investment flows - inward and outward - between the UAE and West Asia. The remaining 64.94% variations are attributed to other variables that may not be included in our Gravity Model.

We shall begin by looking at the explanatory variables results similar to the approach we followed in previous chapters. The coefficient of the combined GDP - nominal is positive; however, it is insignificant (p-value=0.321). Therefore we do not have enough evidence to support the assumption that the foreign direct investment flows inward and outward, from and to the UAE tend to be higher with countries that have higher nominal GDP. In other terms, we do not have enough evidence that the variation in the total flow of foreign direct investments between the UAE and West Asia Region is explained by the variation in the combined gross domestic product in nominal terms of the countries in both sides over the 18 years from 1999 until 2016.

When looking at the distance variable, we notice a positive coefficient; however, due to the high p-value=0.627, we do not have enough evidence that the variation in distance affects the total flows of the foreign direct investments between the UAE and West Asia. Also, and when examining the population variable coefficients, we observed an insignificant relationship between the variation in the size of the population and the variation of the total flow of foreign direct investments between the UAE and West Asia (p-value=0.125).

Similar to the population variable, we observed an insignificant attribute to the total Area in square meters (p-value=0.931). Therefore, we do not have enough evidence that the variation in the total foreign direct investment flows between the UAE and West Asia region is explained by the variation in the Area in square meters of both the UAE and West Asian countries. The total flow of the Foreign Direct Investments is hypothesized to be influenced by the existence of the foreign missions as well as UAE missions abroad, however in our model and given the data we examined, we do not have enough evidence to support that the existence of UAE missions in West Asian countries, affect the variation in the total foreign direct investments outward and inward between them (p-value=0.745).

However, we have enough evidence that the variation in the total foreign direct investment flows between the UAE and West Asia region is explained by the variation in the number of West Asian Countries mission in the UAE. Interestingly, the coefficient is negative which indicates that having West Asian missions in the UAE contributes negatively on the total flow of foreign direct investments between the UAE and the West Asian Region (p-value=0.039). We now move on to observe the results of the dummy variable in our augmented gravity model for the investment flows. We

do not have enough evidence that for a country being landlocked does not explain the variation in the total foreign direct investments between the UAE and West Asia region (p-value=0.600).

Similar to the previous variable, the countries attribute of being an island or not is statistically insignificant in our model, i.e. we do not have enough evidence that the variation in the total foreign direct investment flows between the UAE and West Asia region is explained by the variation in the island variable (p-value=0.631).

As discussed before, we assume a very high significance of having a common language with the UAE, i.e. Arabic as an official language, in influencing the flows of foreign direct investments both ways positively. Therefore, having Arabic as an official language in a country is assumed to increase the total Foreign Direct investment flows between the UAE and the other Arabic speaking country. However, in the regression output table of total foreign direct investments between the UAE and West Asia region, the variable has been omitted from the regression output table due to collinearity issues.

Also, and line with the prevailing investment principles, we assumed that the foreign direct investment flows both ways between the UAE and other countries are positively influenced by having borders, i.e. neighbouring the UAE. However, in the case of West Asia region and since the UAE does not share any borders with the countries in this region, we observed that the variable BorderShare had been omitted from the regression output table due to collinearity issues.

In the case of that trading country being ever colonized, the results obtained from the augmented gravity model show that we do not have enough evidence that the variation

in the total foreign direct investment flows both ways between the UAE and West Asia Region is explained by the other country being colonized historically or not (p-value=0.162).

On the legislative front, the model omitted the variable of the Free Trade Agreement (FTA) due to collinearity and therefore, we are unable to comment on its effect on the variation of the total foreign direct investment between the UAE and West Asian countries. Also, bilateral flows of foreign direct investments inward and outward between the UAE and West Asian Region is shown to be non-linearly related to having an Investment Promotion and Protection Agreement (BIT/IPPA) as the p-values are equal to 0.655.

However, the Avoidance of Double Taxation on Income Agreement (DTA) is shown to be statistically significant and negatively affects the total bilateral flows of foreign direct investments inward and outward of the UAE (p-value=0.021). Thus, we, therefore, have enough evidence that having the Avoidance of Double Taxation on Income Agreement (DTA) explains the variation of the total bilateral flows of foreign direct investments inward and outward between the UAE and West Asia.

Chapter 4: Discussion

The purpose of this chapter is to discuss the results and findings of this study concerning the theoretical body of knowledge of the impact of economic diplomacy on the bilateral flows of trade and investment of the UAE and its practical implications. The chapter begins by discussing the findings concerning the theoretical framework introduced in the literature review. Then the findings are addressed for professionals in the diplomatic field being examined. In other words, this chapter addresses the dissertation findings practical implications.

As shown in previous chapters, the economic diplomacy tools, along with the determinants of trade and investment flows have been identified to be as follows:

- The Gross Domestic Product
- The Distance in kilometres
- The Population
- The Area of both countries in square kilometres
- The number of foreign missions in the UAE
- The number of UAE missions in other countries
- Being landlocked
- Being an island
- Having a common language
- Having shared borders with the UAE
- Having been ever colonised
- Having a signed and ratified Free Trade Agreement
- Having a signed and ratified Investment Promotion and Protection Agreement (IPPA/BIT)
- Having a signed and ratified Avoidance of Double Taxation on Income Agreement (DTA)

The above variables have been tested in our regression augmented gravity models for both trade and investment and different forms of the variables were used in each gravity model as per the academic uses are shown in the references papers we reviewed to determine our model.

In the following section, we discuss in details the implications of each economic tool and determinant of trade and investment on the UAE's economic diplomacy paving the way to conclude the following chapter. Moreover, we shed light on some economic policy recommendations for each region in the world and identify the attributes, determinates of trade and investments, and economic diplomacy tools that boost the bilateral flow of non-oil trade and foreign direct investments.

4.1 Attributes, Trade Determinants, Investments, and Economic Diplomacy Tools that Impact the Total Flow of Non-Oil Bilateral Trade and Foreign Direct Investments

4.1.1 Gross Domestic Product (GDP) as a Determinate of Trade and Investment Flows

We begin this discussion by looking at the effects of the gross domestic product (GDP) across all regions and countries and how it affects the flows of trade and investment. Therefore, the first part of this discussion subsection we shall discuss how the gross domestic product affects the flows of trade between the United Arab Emirates and the other regions and countries. As shown in the results tables discussed in the previous chapter, the GDP per capita plays a pivotal role in determining the flows of trade between the UAE and the countries in various regions in the world. We have enough evidence that the total trade is positively related to the magnitude of the GDP per capita of both the UAE and the other countries in the world (p-value=0).

In almost all the regions in the world, we noticed a very high significance of the positive coefficient of the GDP per capita variable with the p-value in all the regions is less than 5%. Surprisingly, we have enough evidence that the GDP per capita negatively impacts the total flow of trade between the UAE and Australasia (p-value=0.022). Also, we have also concluded that the Gross Domestic Product Per Capita has no relation to the flow of trade between the UAE and the Pacific Islands (p-value=0.607).

The largest positive coefficient of the GDP per capita in our augmented gravity model for trade was 3.389 (p-value=0) observed in the regression output table for the augmented gravity trade model for the UAE with South America region. This is followed by having a coefficient of 1.79 with p-value=0 observed in the trading regression output of the UAE trade flows with the Caribbean.

Therefore, when it comes to the GDP per capita, we observe that the UAE has more prospects to make more trade with countries that have higher GDP per capita only because this variable reflects the economic prosperity of nations and the wealth of the people of each country and region. This ultimately translates to prospective demand on the goods and services that are being traded between both the UAE and the other country. Therefore, its positive impact on the flow of trade is commendable and should be taken into consideration when we assess the trade potential with any country. That being said, we also emphasise on the higher prospects of doing trade with South America and the Caribbean regions due to the highly positive relationship that eventually is reflected on the magnitude of the trade possibilities and transactions that could be executed and ultimately boosting the overall non-oil bilateral trade of the UAE.

Next, we shall discuss the Gross Domestic Product as a determinant of investment flows between the UAE and the other countries and regions. We begin by looking at the effects of the Gross Domestic Product across all regions and countries and how it affects the flows of investment. As shown in the results tables discussed in the previous chapter, the Gross Domestic Product similar to the case in the Trade Model plays a pivotal role in determining the flows of investment between the UAE and the countries in various regions in the world. We have enough evidence that the total foreign direct investments flow is positively related to the magnitude of the Gross Domestic Product of both the UAE and the other countries in the world (p-value=0).

In three regions in the world, we noticed a very high significance of the positive coefficient of the Gross Domestic Product variable with the p-value less than 0.05 in all of the three regions. The regions that have a positive and significant coefficient are the Gulf Cooperation Council, East Asia, and Arab Countries. We have also concluded that the Gross Domestic Product has no relation with the flow of investments between the UAE and several regions namely North and South America, Europe, West Asia, Australasia, Africa, the Pacific and the Caribbean.

The largest positive coefficient of the Gross Domestic Product in our augmented gravity model for investment was 1.72 with a p-value=0.001 observed in the regression output table for the augmented gravity investment model for the UAE with the Gulf Cooperation Council region. This is followed by having a coefficient of 1.19 with p-value=0.011 observed in the investment regression output of the UAE investment flows with Arab Region, and finally a coefficient of 0.43 observed with a p-value of 0.017 for the East Asia region.

Therefore, when it comes to the Gross Domestic Product we observe that the UAE has more prospects to grow the bilateral flow of investments with countries that have higher Gross Domestic Product in the aforementioned three regions only due to the fact that this variable reflects the economic prosperity of the countries of the region and the wealth of the people of each country. This ultimately translates to prospective partnerships and higher investment appetite as well as other factors that each investor should take into consideration during the due diligence process before conducting an investment transaction. Therefore, the Gross Domestic Product positive impact on the flow of investment is commendable and should be taken into consideration when we assess the investment prospects.

4.1.2 Distance in Kilometres Impact on the Flows of Trade and Investment Flows

As far as Distance is concerned in all regions and countries regression outputs and how it affects the flows of trade and investment, the first part of this subsection discusses how the Distance affects the flows of trade between the United Arab Emirates and the other regions and countries. As shown in the results tables discussed in the previous chapter, the Distance plays an important role in determining the magnitude of the flows of trade between the UAE and the countries in various regions in the world; it showed much more significance than the previous factor the Gross Domestic Product.

We have enough evidence that the total trade is mainly negatively related to the Distance between both the UAE and the other countries in the world. In almost all the regions in the world, we noticed a very high significance of the negative coefficient of the Distance variable with the p-value in all the regions is less than 5%. Surprisingly

though, we noticed that the Distance was positively related to the total flow of bilateral trade with two regions namely the Australasia region which has a high positive coefficient equals 29.39 with a significant p-value =0 and the Caribbean region with another large positive coefficient of 27.23 and a p-value of 0. We have also concluded that the Distance has no relation with the flow of trade between the UAE and the members of the Gulf Cooperation Council (p-value=0.312), Europe (p-value=0.968) and Sub Saharan Africa (p-value=0.511).

The most negative coefficient of the Distance variable in our augmented gravity model for trade was -14.96 with a p-value=0 observed in the regression output table for the augmented gravity trade model for the UAE with South America region. This is followed by having a coefficient of -12.46 with p-value=0 observed in the trading regression output of the UAE trade flows with North America.

Therefore, when it comes to the Distance variable we observe that the UAE has more prospects to make more trade with countries that are far from the UAE but in two specific regions namely Australasia and the Caribbean, while mainly the distance negative affects trade simply due to the fact that this variable reflects the logistics burden to transfer goods and services with the costs being higher as the distance grows farther. This ultimately translates to exploring markets which are large but in smaller distances to the UAE in order to easily exchange the goods and services that are being traded between both the UAE and the other country.

Next, we shall discuss the Distance as a determinant of investment flows between the UAE and the other countries and regions. We begin by looking at the effects of the Distance across all regions and countries and how it affects the flows of investment. As shown in the results tables discussed in the previous chapter, the Distance, on the

contrary to its significance in the Trade Model, has no effects in determining the flows of investment between the UAE and the countries in various regions in the world. We do not have enough evidence that the total investment flows are related to the distance in kilometres between both the UAE and the other countries in the world (p-value=0.514).

In all the regions in the world we noticed insignificance of the coefficients of the Distance variable with the p-value always more than 5% while in regions like the Pacific and the Caribbean, it was not reported due to a small number of observations. Therefore, when it comes to Distance we observe that the UAE investment flows are not related to the distance of the countries of the world, this could simply be attributed to the advancement in the communication and banking systems which eliminated distance to be an obstacle or enabler of investment as nowadays globalisation and digital economy have become the norm in the investment world.

4.1.3 The Population Size of Both Sides as a Determinant of Trade and Investment Flows

The size of the Population of both sides is discussed here as a determinant of trade and investment flows between the UAE and the other countries and regions. We begin this discussion by looking at the effects of the Population across all regions and countries and how it affects the flows of trade and investment. Therefore, the first part of this discussion subsection we shall discuss how the population affects the flows of trade between the UAE and the other regions and countries.

As shown in the tables of generated results as discussed in the previous chapter, the population plays an essential role in determining the magnitude of flows of trade between the UAE and the countries in various regions in the world. We have enough

evidence that the total trade is positively related to the size of the population of both the UAE and the other countries in the world (p-value=0). In all the regions in the world, we noticed a very high significance of the positive coefficient of the Population variable with the p-value in all the regions being less than 0.05 across all regions.

The largest positive coefficient of the Population in our augmented gravity model for trade was 2.64 with a (p-value=0) observed in the regression output table for the augmented gravity trade model for the UAE with Sub Saharan Africa region. This is followed by having a coefficient of 2.34 with (p-value=0) observed in the trading regression output of the UAE trade flows with Pacific islands. Therefore, when it comes to Population variable we observe that the UAE has more prospects to do more trade with countries that have higher population simply due to the fact that this variable reflects the high quantitative demand by those regions and countries due to a large number of people that constitute the destination markets for goods and services as well as large population countries also have larger production capacity and thus exports capability.

This ultimately translates to prospective demand on the goods and services that are being traded between both the UAE and the other country. Therefore, the Population magnitude's positive impact on the flow of trade is commendable and should be taken into consideration when we assess the trade potential with any country. That being said, we also emphasise on the higher prospects of doing trade with highly populous countries in all over the world due to the highly positive relationship that eventually is reflected on the magnitude of the trade possibilities and transactions that could be executed and ultimately boosting the overall non-oil bilateral trade of the UAE.

Next, we shall discuss the Population as a determinant of investment flows between the UAE and the other countries and regions. We begin by looking at the effects of the Population across all regions and countries and how it affects the flows of investments. As shown in the results tables discussed in the previous chapter, the Population on the contrary to the case in the Trade Model plays a lesser important role in determining the flows of investment between the UAE and the countries in various regions in the world. We have enough evidence that the total investment is positively related to the magnitude of the Population of both the UAE and the other countries in the world (p-value=0).

When we tested each region separately, we concluded that we do not have enough evidence that population is a critical factor in determining the flow of foreign direct investments between them and the UAE (p-value>0.05). Therefore, when it comes to the size of Population we observe that the UAE has more prospects to grow the bilateral flow of investments with populous countries in general due to the fact that this variable reflects the size of the market quantitatively, thus the demand as well as the availability of labour and expertise for the investments to become viable. This ultimately translates to prospective partnerships and higher investment appetite as well as other factors that each investor should take into consideration during the due diligence process before conducting an investment transaction.

4.1.4 The Area of Both Countries in Square Kilometres as a Determinant of Trade and Investment Flows

Initially, we commence by observing the effects of the Area in square kilometres across all regions and countries and how it affects the flows of trade and investments. Therefore, the first part of this discussion sub-section we discuss how the Area in

square kilometres affects the flows of trade between the United Arab Emirates and the other regions and countries. As shown in the results tables discussed in the previous chapter, the Area in square kilometres plays a pivotal role in determining the flows of trade between the UAE and the countries in various regions in the world. We have enough evidence that the total trade is negatively related to the magnitude of the area size in square kilometres of both the UAE and the other countries in the world (p-value=0).

In almost all the regions in the world, we noticed a very high significance of the negative coefficient of the area in square kilometres variable with the p-value in all the regions below 5%. Surprisingly though, we noticed that the area per square kilometres was positively related to the total flow of bilateral trade with the Australasia with the p-value being less than 5% in both. We have also concluded that the area in square kilometres has no relation with the flow of trade between the UAE and the South American Region with a p-value=0.113.

The significant negative coefficient of the Area in square meters in our augmented gravity model for trade was -27.39 with a p-value=0 observed in the regression output table for the augmented gravity trade model for the UAE with the Caribbean region. This is followed by having a coefficient of -22.62 with p-value=0 observed in the trading regression output of the UAE trade flows with the North American region.

Therefore, when it comes to the Area in square kilometres we observe that the UAE has more prospects to make more trade with countries that have lesser areas in kilometre square simply due to the fact that this variable reflects the logistical burden carried by exporters and importers to reach markets in larger countries that may lag in terms of infrastructure development and thus may have lesser connectivity. This

ultimately translates to challenges faced by the suppliers of the goods and services that are being traded between both the UAE and the other country. Therefore, its negative impact on the flow of trade should be taken into consideration when we assess the trade potential with any country. That being said, we also emphasise on the high prospects of making a trade with larger countries in Australasia in terms of size in kilometre square.

Subsequently, we shall discuss the area in kilometre square as a determinant of investment flows between the UAE and the other countries and regions. We begin by looking at the effects of the Area per square meter across all regions and countries and how it affects the flows of investments. As shown in the results tables discussed in the previous chapter, the Area in square meter in contrast with the case in the Trade Model plays an antagonising role on the flows of investment between the UAE and the countries in various regions in the world. We have enough evidence that the total investment is negatively related to the size of each country in square kilometres of both the UAE and the other countries in the world (p-value=0.039).

We had also concluded that the Area in square kilometres has no relation with the flow of investments between the UAE and various regions in the world especially when we ran the random effect GLS regression for each region alone as the p-value has always been above 5%. Therefore, when it comes to the Area per square meters, we observe that the UAE has more prospects to grow the bilateral flow of investments with countries that have the smaller geographical area in square meters in Europe only because this variable reflects the lesser logistical burden for investments as well as connectivity and manageability. This ultimately translates to the need to study other factors that each investor should take into consideration during the due diligence

process before conducting an investment transaction. Therefore, the Area size in kilometre square's impact on the flow of investment is a crucial factor which should be taken into consideration when potential investors assess the investment prospects with Europe.

4.1.5 The Number of Foreign Missions in the UAE as an Economic Diplomacy Tool to Boost Trade and Investment Flows

We shall begin this sub-section in discussing the economic diplomacy tools used to boost trade and investment flows between the UAE and the other countries and regions. We used the Foreign missions in the UAE as a variable in the Trade Augmented Gravity Model and the Investment Augmented Gravity Model. Therefore, the first part of this discussion subsection discusses how having foreign missions in the UAE affects the flows of trade between the United Arab Emirates and the other regions and countries. As shown in the results tables discussed in the previous chapter, we do not have enough evidence to support that having foreign missions in the UAE plays a role in determining the flows of trade between the UAE and the countries in various regions in the world (p-value=0.152).

However, we have enough evidence with the p-value less than 5% that having foreign embassies from the Gulf Cooperation Council countries and East Asian countries positively affect the total bilateral flow of non-oil trade between the UAE and those regions. In contrast, we also have enough evidence with a p-value less than 5% that having foreign embassies from the African countries negatively impacts the total bilateral flow of non-oil trade between the UAE and those regions. In almost all the other regions in the world did not have enough evidence that having a foreign mission

in the UAE explains the variation in the total bilateral non-oil trade between the UAE and them as the p-value was above 5% in all of these regions.

The largest positive coefficient of the foreign missions variable in our augmented gravity model for trade was 24.49 with a p-value=0 observed in the regression output table for the augmented gravity trade model for the UAE with the Gulf Cooperation Council region. This is followed by a coefficient of 0.536 with p-value=0.026 observed in the trading regression output of the UAE trade flows with the East Asia region.

Therefore, when it comes to having foreign missions in the UAE we observe that the UAE has more prospects to do more trade with countries that have higher missions representation in the UAE from the GCC and East Asian countries simply due to the fact that this variable reflects the economic diplomacy activities and tools used and promoted by those countries missions especially when it comes to trade offices that look after all commercial matters and conducts initiatives and programs for trade promotion which include trade missions, legislative assistance to traders and many other services. This ultimately translates to the prospective exchange of the goods and services that are being traded between both the UAE and these regions which also comprise a growing demand for goods and services from the Far East and vice versa. The UAE, in this case, plays a pivotal role as a bridge for re-export from East Asia to the west and vice versa.

Next, we shall discuss having foreign missions in the UAE as an economic diplomacy tool to boost investment flows between the UAE and the other countries and regions. We begin by looking at the effects of several foreign missions in the UAE across all regions and countries and how it affects the flows of investments. As shown in the results tables discussed in the previous chapter, we do not have enough evidence that

having foreign missions in the UAE, similar to the case in the Trade Model, plays a role in determining the flows of investment between the UAE and the countries in various regions in the world (p-value=0.778). Surprisingly, we have enough evidence that having foreign missions in the UAE from West Asia, and South America region impacts the total flow of foreign direct investments between that UAE and that regions with a p-value less than 5% in both negatively.

We have also concluded that the number of foreign missions in the UAE has no relation with the flow of investments between the UAE and the rest of the regions. Therefore, and as an implication to the above findings. It was observed that the number of foreign missions in the UAE results indicated a minimal relationship with the magnitude of trade and investments. This could be the case because historically, the foreign missions might not have the relevant economic expertise to carry out economic diplomacy initiatives. Another reason is the possibility that the missions were under budgetary pressure that resulted in minimal personnel in charge of trade and investment promotion.

Another argument could be that the efficiency of the usage of economic diplomacy means was not to the level that promotes trade and investments. Also, there are several tariff and non-tariff barriers to trade that may have hindered the number of missions from impacting the flow of trade and investments. Several regions have countries which are not open economies and apply those barriers as part of their economic policy in order to promote local content and protect the local merchants.

In some other cases, the coefficient of the Foreign Embassies variable was negative which implies a hindering role that these missions impose on the overall trade and investment namely in Sub-Saharan Africa, South America, and West Asia. This could

be related to other factors that prevent traders and investors from conducting business in the existence of these missions. Some of these missions have historically been conducting investigations and submitting court cases against their nationals in the UAE on allegations of corruption, although many of these allegations are politicised.

While that is the case, those embassies have also played an active role in coordination with the UAE authorities to fight money laundering, fraud and corruption in various legitimate cases. Thus, opening a foreign mission from these regions might send a warning signals to financial criminals and eventually divert their operations out of fear of being caught and identified by their missions and brought to the UAE justice system. Another argument that could also be discussed here is the possibility of the adverse and disruptive role of the lobbying activities that may have affected the influence of the missions on the overall trade and investments. Towards this end, this discussion could be investigated further in future research to understand, explain and explore the causes of the zero or adverse effects of the foreign missions in the UAE from several regions.

4.1.6 The Number of UAE Missions in Specific Countries as an Economic Diplomacy Tool to Boost Trade and Investment Flows

Moving on, in this subsection to discuss the effects of having a UAE mission in other countries across all regions and countries and how it affects the flows of trade and investment. Therefore, the first part of this discussion subsection we shall discuss how having a UAE mission in other countries affects the flows of trade between the United Arab Emirates and the other regions and countries.

As shown in the results tables discussed in the previous chapter, UAE missions abroad are mostly insignificant in affecting the flows of trade between the UAE and most of

the regions in the world. Despite that, there is enough evidence that the total bilateral non-oil trade is negatively related, with a coefficient of -0.242, to having a United Arab Emirates missions in other countries around the world (p-value=0.004). Similarly, when we zoomed into the various regions of the world, we found enough evidence with a very high significance of the negative coefficient of having UAE missions in other counties variable in African countries with the (p-value=0). Also, having a UAE mission abroad has no relation with, and does not explain the variation of the total flow of bilateral non-oil trade between the UAE and all the other regions.

Therefore, when it comes to having UAE missions abroad, we observe that the UAE has more prospects to make more trade with countries regardless of the UAE having embassies or consulates in various regions around the world. The general model shows a negative relationship overall. The negative impact on the flow of trade should be taken into consideration when assessing the trade potential with any country and the future expansion plans of our diplomatic representation.

Next, we shall discuss having UAE missions abroad as an economic diplomacy tool to enhance investment flows between the UAE and the other countries and regions. We begin by looking at the effects of having UAE missions abroad across all regions and countries and how it impacts the flows of investments. As shown in the results tables discussed in the previous chapter, having UAE missions abroad, on the contrary to the case in the Trade Model plays a lesser important role in determining the magnitude of the flows of investment between the UAE and the countries in various regions in the world. We do not have enough evidence that the total foreign direct investments flow is related to the number of UAE mission abroad in almost all the regions (p-value=0.420).

We have also concluded that the number of UAE missions abroad has no relation with the flow of investments between the UAE and all the regions around the world as p-value in the regression output for these region exceeds 5%. Therefore, when it comes to having UAE missions abroad and trade and investments promotion. It is observed that the UAE prospects to grow the bilateral flow of investments with various regions around the world is irrelevant to the number of UAE missions and consulates in those regions. This is an interesting area to be investigated to understand better the reasons for the limited effects of UAE Embassies on the Trade and investment figures and whether the reasons are intrinsic or extrinsic to the diplomatic field.

Therefore, and as an implication to these findings. It was observed that the number of UAE mission's abroad regression results indicated a minimal relationship with the magnitude of trade and investments across all the regions except sub-Saharan Africa. This could be the case because historically, the UAE missions might not have the relevant economic expertise to carry out economic diplomacy initiatives. As of today, the UAE has only five government-related Trade Offices across the world in the USA, China, India, Switzerland and Egypt while the rest of the trade offices are mainly of non-government, private sector entities that only look after those entities interests. Another reason is the possibility that the UAE missions were understaffed which resulted in the absence of personnel in charge of trade and investment promotion.

Another argument could be that the efficiency of the usage of economic diplomacy tools was not to the level that could influence and promote trade and investments. Also, there are several tariff and non-tariff barriers to trade that may have hindered the number of UAE missions from impacting the flow of trade and investments. Several regions have countries which are not open economies and apply those barriers as part

of their economic policy in order to promote local content and protect the local merchants. Another Factor that may cause the insignificance of the UAE missions in affecting trade and investments is the combined effects of the state-owned enterprises, medium and large corporations, multinational companies and other non-government economic organisations in facilitating trade and investment flows outside the diplomatic field.

The only case in which the coefficient of the UAE Missions variable was negative was witnessed in Sub-Saharan Africa which implies a hindering role that these missions impose on the overall trade and investment. This could be related to other factors that prevent traders and investors from conducting business in the existence of these missions. Similar to the case of the Foreign Missions, Sub-Saharan African countries have been suffering from corruption, money laundering and fraud. While that is the case, UAE embassies have also played an active role in coordination with the host countries authorities to fight money laundering, fraud and corruption in various legitimate cases. The UAE has signed and ratified several agreements with Sub-Saharan Africa on legal assistance and fighting corruption.

Thus, opening a UAE mission from these regions might send a warning signal to financial criminals and eventually divert their operations out of fear of being caught and identified and ultimately face justice. Eventually, the negative coefficient may correspond to a positive outcome which tackles the global phenomena of corruption that is widespread in many sub-Saharan African countries. The UAE today is at the forefront of fighting corruption and places high importance to thwart financial crimes from being conducted through the UAE's sophisticated financial markets. Another argument that could also be discussed here is the possibility of the adverse and

disruptive role of the lobbying activities that may have affected the influence of the missions on the overall trade and investments.

Towards this end, this discussion could be investigated further in future research to understand, explain and explore the causes of the zero or adverse effects of the foreign missions in the UAE from several regions.

4.1.7 The Attribute of a Country Being Land Locked as a Determinant of Trade and Investment Flows

In this subsection, we shall discuss being a landlocked attribute of a country as a determinant of trade and investment flows between the UAE and the other countries and regions. As shown in the results section, we used the landlocked variable for the Trade Augmented Gravity Model, and for the Investment Augmented Gravity Model. We begin this discussion by looking at the effects of being landlocked across all regions and countries and how it affects the flows of trade and investment. Therefore, the first part of this discussion subsection we shall discuss how being a landlocked country affects the flows of trade between the United Arab Emirates and that country. As shown in the results tables discussed in the previous chapter, being landlocked is one of the attributes in determining the flows of trade between the UAE and the countries in various regions in the world.

However, we do not have enough evidence that the total trade is negatively related to being a landlocked country within a region when trading with the UAE (p-value=0.905). However, when we tested for each region separately, we noticed insignificance of the negative coefficient of the landlocked variable with the p-value in all the regions is above 5% except for West Asia, which was significant and less than 5%. We conclude that being landlocked is positively related to the total flow of

bilateral trade with the West Asia region (p-value=0.011). We have also concluded that the attribute of being landlocked has no relation to the flow of trade between the UAE and all other regions.

Therefore, when it comes to being a landlocked country, we observe that the UAE has more prospects to make a trade with countries that are landlocked in West Asia. That being said, we emphasize also on the higher prospects of doing trade with West Asia landlocked countries due to the highly positive relationship that eventually is reflected on the magnitude of the trade possibilities and transactions that could be executed and ultimately boosting the overall non-oil bilateral trade of the UAE, especially that many of the landlocked countries in West Asia have leapt forward recently in the development of connectivity and infrastructure along with logistical services.

Next, we shall discuss being a landlocked country as a determinant of investment flows between the UAE and the other countries and regions. We begin by looking at the effects of the landlocked across all regions and countries and how it affects the flows of investment. As shown in the results tables discussed in the previous chapter, the landlocked on the contrary to the case in the Trade Model, is less important and insignificant in determining the flows of investment between the UAE and the countries in various regions in the world (p-value=0.313).

When we look at the regional results, we have enough evidence that the total foreign direct investments flow is negatively related to being a landlocked country in South America (p-value=0.045). However, in all the other regions of the world, we noticed insignificant coefficients of the landlocked variable with the p-value above 5% in all regions or the variable had been omitted due to collinearity. Therefore, when it comes to being a landlocked country, we observe that the UAE's prospects to grow the

bilateral flow of investments with countries is irrelevant to the fact of that other country is landlocked or not except for South America where being landlocked negatively impacts the flow of investments between them and the UAE.

As there might be other factors that affect the investment flows and being landlocked is not among them, which is simply because this attribute does not reflect the economic prosperity of the countries of the region and the wealth of the people of each country. This obligates that investors from both sides have to assess other factors and each investor should take into consideration these factors during the due diligence process before conducting an investment transaction.

4.1.8 The Attribute of a Country Being an Island as a Determinant of Trade and Investment Flows

The effects of being an island across all regions and countries and how it affects the flows of trade and investment is discussed in this subsection. Therefore, the first part of this discussion subsection we shall discuss how being an island affects the flows of trade between the United Arab Emirates and the other regions and countries. As shown in the results tables discussed in the previous chapter, being an island is insignificant in determining the flows of trade between the UAE and the countries in various regions in the world (p-value=0.893). We do not have enough evidence that the total bilateral non-oil trade is related to the fact of being an island.

When we look at the regions separately, in two regions in the world, we noticed a very high significance of the positive coefficient of the being an island variable with the p-value in all the regions being less than 5%. These regions are the Gulf Cooperation Council and Oceania/Pacific islands. We have also concluded that being an island has no relation to the flow of trade between the UAE and all the other regions.

The largest positive coefficient of being an island in our augmented gravity model for trade was 81.156 with a p-value=0.003 observed in the regression output table for the augmented gravity trade model for the UAE with the Gulf Cooperation Council region. This is followed by having a coefficient of 22.644 with p-value=0.019 observed in the trading regression output of the UAE trade flows with the Oceania/Pacific islands countries.

Therefore, when it comes to being an island, we observe that the UAE has tended to make more trade with countries that are islands in the Gulf Cooperation Council, and the Pacific regions. This positive impact on the flow of trade is commendable, and these regions should be taken into consideration when assessing the trade potential with any country is an island. That being said, this eventually is reflected in the magnitude of the trade possibilities and transactions that could be executed and ultimately boosting the overall non-oil bilateral trade of the UAE.

Next, we shall discuss being an island as a determinant of investment flows between the UAE and the other countries and regions. We begin by looking at the effects of the island variable across all regions and countries and how it affects the flows of investment. As shown in the results tables discussed in the previous chapter, is an island, similar to the case in the Trade Model, is irrelevant when determining the flows of investment between the UAE and the countries in various regions in the world with a p-value = 0.774. Thus, we do not have enough evidence that the total investment flows are related to the attribute of being an island of the other countries in the world.

We have also concluded that being an island has no relation with the flow of investments between the UAE and all the regions separately as the p-value exceeded 5% in all of the regression outputs. Therefore, when it comes to being an island, we

observe that none of the regions has shown significance in being an island and affecting the trade flows. This ultimately translates to possible other factors that each investor should take into consideration during the due diligence process before conducting an investment transaction.

4.1.9 The Attribute of Having a Common Language as a Determinant of Trade and Investment Flows

In this subsection, we discuss having a common language as a determinant of trade and investment flows between the UAE and the other countries and regions. First, we start by looking at the effects of having a common language across all regions and countries and how it affects the flows of trade and investment. Therefore, the first part of this discussion subsection we shall discuss how having a common language affects the flows of trade between the UAE and the other regions and countries. As shown in the results tables discussed in the previous chapter, having a common language plays a pivotal role in determining the flows of trade between the UAE and the countries in various regions in the world (p-value=0).

We have enough evidence that the total trade is positively related to having a common language between the UAE and the other countries in the world. However, when we tested each region separately, noticed that having a common language is irrelevant is most of the regions as the p-value was more than 5%. The only regions with significant effects of having common languages Sub-Saharan African and G20 countries. Therefore, when it comes to having a common language, we observe that the UAE has more prospects to make more trade with Sub-Saharan African countries and members of the G20 that have Arabic as an official language simply because this eases the communication and also means similarities in the culture.

This ultimately translates to a prospective boost of exchange of the goods and services that are being traded between both the UAE and African countries that speak Arabic. Therefore, its positive impact on the flow of trade between the UAE and Africa is commendable and should be taken into consideration when we assess the trade potential with any African country. That being said, we emphasize also on the higher prospects of doing trade with Arabic speaking Sub-Saharan African countries and the members of the G20 due to the highly positive relationship that eventually is reflected on the magnitude of the trade possibilities and transactions that could be executed and ultimately boosting the overall non-oil bilateral trade of the UAE.

Next, we shall discuss having a common language as a determinant of investment flows between the UAE and the other countries and regions. We begin by looking at the effects of having a common language across all regions and countries and how it affects the flows of investment. As shown in the results tables discussed in the previous chapter, having a common language, and similar to the case in the Trade Model, plays a significant decisive role in determining the flows of investment between the UAE and the countries in various regions in the world. We have enough evidence that the total trade is positively related to having a common language between both the UAE and the other countries in the world (p-value=0.003).

However, when we tested each region separately, we noticed an insignificant coefficient of the language variable with either the p-value more than 0.05 or mostly being omitted due to collinearity issues across all regions. Therefore, we concluded that having a common has no relation with the flow of investments between the UAE and specific regions in the world.

Therefore, when it comes to having a common language we observe that the UAE has more prospects to grow the bilateral flow of investments with countries irrelevant of having a common language or not merely due to the fact that globalization and ease of doing business are predominantly independent of Arabic language and most countries today use English documents, which are widely spoken all over the world.

4.1.10 The Attribute of a Having Shared Borders as a Determinant of Trade and Investment Flows

The variable of having shared borders as a determinant of trade and investment flows between the UAE, and the other countries and regions are discussed in this subsection. We start this discussion by looking at the effects of having shared borders across all regions and countries and how it affects the flows of trade and investment. Therefore, the first part of this discussion subsection we shall discuss how having shared borders affects the flows of trade between the United Arab Emirates and the other regions and countries.

As shown in the results tables discussed in the previous chapter, sharing borders with the UAE plays an insignificant role in determining the flows of trade between the UAE and the countries in various regions in the world. We do not have enough evidence that the total trade is related to having borders shared between both the UAE and the other countries in the world (p-value=0.765). However, when we tested for each region separately, the only region which showed significant coefficient for having a shared border was the Gulf Cooperation Council, this is due to the fact that the UAE does not share borders with any country outside the gulf cooperation council and thus for all the other regions the coefficient was insignificant and on several outputs it was omitted due to collinearity.

The coefficient of sharing borders with the UAE among the Gulf Cooperation Council is estimated at 2.63 with (p-value=0.019). We have also concluded that having shared borders with the UAE has no relation with the flow of trade between the UAE all the other regions as the p-value was higher than 5%. Therefore, when it comes to sharing borders with the UAE we observe that the UAE has more prospects to make more trade with neighbouring Gulf Cooperation Council members that share land borders with the UAE namely Oman and Saudi Arabia simply due to the fact that this variable reflects proximity and the ease of moving goods and services to the neighbouring markets.

This ultimately translates to prospective demand on the goods and services that are being traded between both the UAE and Saudi Arabia and Oman. Therefore, its positive impact on the flow of trade is commendable and should be taken into consideration when we assess the trade potential with the Gulf Cooperation Council countries. That being said, we also emphasise on the higher prospects of doing trade with Saudi Arabia and Oman due to the highly positive relationship that eventually is reflected on the magnitude of the trade possibilities and transactions that could be executed and ultimately boosting the overall non-oil bilateral trade of the UAE.

Next, we shall discuss having shared borders with the UAE as a determinant of investment flows between the UAE and the other countries and regions. We begin by looking at the effects of having shared borders across all regions and countries and how it affects the flows of investment. As shown in the results tables discussed in the previous chapter, having borders with the UAE in line with the case in the Trade Model plays an insignificant role in determining the flows of investment between the UAE and the countries in various regions in the world. We do not have enough evidence

that the total foreign direct investments flow is related to having shared borders between both the UAE and the other countries in the world (p-value=0.347). However, when we test each region separately, the variable has been omitted due to collinearity as the UAE only shares a border with two of the Gulf Cooperation Council members namely Saudi Arabia and Oman.

We have also concluded that having shared border with the United Arab Emirates has no relation with the flow of investments between the UAE and any region of the world including the countries members of the Gulf Cooperation Council. Therefore, when it comes to having shared borders with the UAE, we observe that the UAE has more prospects to grow the bilateral flow of investments with countries irrelevant to the fact that these countries share borders with the UAE or not. This ultimately translates to prospective partnerships and higher investment appetite irrespective of border sharing as other factors contribute to the magnitude of foreign direct investments flows that each investor should take into consideration during the due diligence process before conducting an investment transaction.

4.1.11 The Attribute of having ever been Colonised as a Determinant of Trade and Investment Flows

Now, we shall discuss the variable of being ever colonised as a determinant of trade and investment flows between the UAE and the other countries and regions. We commence by discussion the effects of being ever colonised across all regions and countries and how it affects the flows of trade and investment.

Therefore, the first part of this discussion subsection we shall discuss how being ever colonised affects the flows of trade between the United Arab Emirates and the other regions and countries. As shown in the results tables discussed in the previous chapter,

sharing a colonised history is insignificant in determining the flows of trade between the UAE and the countries in various regions in the world. We do not have enough evidence that the total trade is related to the fact that both the UAE and its trading partner have been colonised before (p-value=0.360).

In South America, North America, Sub-Saharan African countries, West Asia and the G20 countries, we noticed highly significant positive coefficients of the colonised variable with the p-value being less than 5%. The largest coefficient was observed in North America's region followed by South America's Region. In contrast, we noticed that being ever colonised was negatively related to the total flow of bilateral trade with the Caribbean countries (p-value=0.002). We have also concluded that being ever colonised has no relation to the flow of trade between the UAE and the rest of the regions in the world.

Therefore, when it comes to being colonized we observe that the UAE has more prospects to do more trade with South American, North American, Sub-Saharan African, West Asian and the G20 countries that have been colonized simply due to the fact that this variable reflects the willingness of previously colonized countries to catch up with the fast moving world and exchange goods and services with partners of similar economic and demographic constituents. This ultimately translates to prospective demand on the goods and services that are being traded between both the UAE and the other previously colonised country.

Therefore, its positive impact on the flow of trade is commendable and should be taken into consideration when we assess the trade potential. That being said, we emphasize also on the higher prospects of doing trade with South America, North America, Sub-Saharan African countries, West Asia and the G20 countries due to the highly positive

relationship that eventually is reflected on the magnitude of the trade possibilities and transactions that could be executed and ultimately boosting the overall non-oil bilateral trade of the UAE.

Next, we shall discuss having ever been colonised variable as a determinant of investment flows between the UAE and the other countries and regions. We begin by looking at the effects of ever being colonised across all regions and countries and how it affects the flows of investment. As shown in the results tables discussed in the previous chapter, being ever colonized on the contrary to the case in the Trade Model is insignificant in determining the flows of investment between the UAE and the countries in various regions in the world. Thus, we do not have enough evidence that the total flow of foreign direct investments is related to the fact that the other country has ever been colonised (p-value=0.504).

When looking at each region separately, we have also concluded that having been ever colonised has no relation with the flow of investments between the UAE and the rest of the other regions. Therefore, when it comes to ever being colonised variable, we conclude that ever being colonised does not affect the flow of foreign direct investments between the United Arab Emirates and various regions of the world. This ultimately translates to the effects of the other factors either included in our model or not that each investor should take into consideration during the due diligence process before conducting an investment transaction.

4.1.12 Having Signed and Ratified Free Trade Agreement (FTA) as an Economic Diplomacy Tool to Boost Trade and Investment Flows

Moving on to the economic agreements, we shall start discussing the impact of having a signed and ratified Free Trade Agreement (FTA) as an economic diplomacy tool to

boost trade and investment flows between the UAE and the other countries and regions. As shown in the results section, we used the Free Trade Agreement variable in both the Trade Augmented Gravity Model and the Investment Augmented Gravity Model.

First and foremost, we shall discuss how having a signed and ratified free trade agreement affects the flows of trade between the United Arab Emirates and the other regions and countries. As shown in the results tables discussed in the previous chapter, the Free Trade Agreement plays an insignificant role in determining the flows of trade between the UAE and the countries in various regions in the world. Thus, we do not have enough evidence that the total bilateral non-oil trade is related to having a free trade agreement signed and ratified between both the UAE and the other countries in the world (p-value=0.189).

However, when we estimated the coefficients of the free trade agreement variable in the augmented trade gravity model, we noticed a very high significance of a positive coefficient of free trade agreement variable in the European region (p-value=0.007). In contrast, we have enough evidence that having a signed and ratified Free Trade Agreement negatively affects the flow of the bilateral non-oil trade between the United Arab Emirates and East Asia Region (p-value=0).

All in all, when it comes to having a signed and ratified free trade agreement (FTA) we observe that the UAE has more prospects to make more trade with European countries that it has a Free Trade Agreement with that is signed and ratified simply due to the fact that this agreement has various incentives for traders ranging from customs fees elimination. Also, Free trade agreements foster freer trade and investment

flows, encourage business productivity and innovation. FTAs can promote regional integration, enhance competitiveness and can help developing countries.

This ultimately translates to prospective boost on the flow of the goods and services that are being traded between both the UAE and the European region. Therefore, its positive impact on the flow of trade with Europe is commendable and should be taken into consideration when we assess the trade potential with any European country. That being said, we also emphasise on the higher prospects of doing trade with Europe due to the highly positive relationship that eventually is reflected on the magnitude of the trade possibilities and transactions that could be executed and ultimately boosting the overall non-oil bilateral trade of the UAE.

Next, we shall discuss having a signed and ratified free trade agreement as an economic diplomacy tool to boost investment flows between the UAE and the other countries and regions. We begin by looking at the effects of the Free Trade Agreement (FTA) across all regions and countries and how it affects the flows of investment. As shown in the results tables discussed in the previous chapter, the Free Trade Agreement, similar to the case in the Trade Model, plays an insignificant role in determining the flows of investment between the UAE and the countries in various regions in the world (p-value=0.612). Thus, we do not have enough evidence that the total investment flows are related to having a ratified and signed free trade agreement between both the UAE and the other countries in the world.

However, and similar to the case of the trade results, we noticed a very high significance of the positive coefficient of the free trade agreement variable estimated at 1.84 in the East Asia region (p-value=0.027). We have also concluded that the Free

Trade Agreement has no relation with the flow of investments between the UAE and the rest of the regions in the world as the p-value is above 5% in all regression outputs.

Therefore, when it comes to the Free Trade Agreement (FTA), we observe that the UAE has more prospects to grow the bilateral flow of investments with East Asian countries that it has a signed and ratified free trade agreement. This ultimately translates to prospective partnerships and higher investment appetite in East Asian countries that the UAE has FTA with namely Singapore, in addition to other need for each investor to take into consideration other factors during the due diligence process before conducting an investment transaction. Therefore, the Free Trade Agreement positive impact on the flow of investment in the East Asia region is commendable and should be taken into consideration when we assess the future signing of free trade agreements.

4.1.13 Having Signed and Ratified Avoidance of Double Taxation on Income Agreement (DTA) as an Economic Diplomacy Tool to Boost Trade and Investment Flows

The next economic agreement is having a signed, and ratified Avoidance of Double Taxation on Income Agreement (DTA) as an economic diplomacy tool to boost trade and investment flows between the UAE and the other countries and regions. As shown in the results section, we used the Avoidance of Double Taxation on Income Agreement (DTA) for the Trade Augmented Gravity Model, and the Investment Augmented Gravity Model.

Similar to the previous approaches, the initial part of this subsection discusses how having a signed and ratified Avoidance of Double Taxation on Income Agreement (DTA) affects the flows of trade between the United Arab Emirates and the other

regions and countries. As shown in the results tables discussed in the previous chapter, having a signed and ratified Avoidance of Double Taxation on Income Agreement (DTA) has no noticeable effect in determining the flows of trade between the UAE and the countries in various regions in the world.

Thus, we do not have enough evidence that the total trade is related to having a signed and ratified Avoidance of Double Taxation on Income Agreement (DTA) between both the UAE and the other countries in the world (p-value=0.054). However, we noticed the significance of the negative coefficient of the Avoidance of Double Taxation on Income Agreement (DTA) variable in the Sub-Saharan African Countries (p-value=0.028). We have also concluded that having a signed and ratified Avoidance of Double Taxation on Income Agreement (DTA) has an insignificant relationship with the flow of trade between the UAE and the rest of the specific regions as for each region the p-value was more than 5% or in some instances it was omitted due to collinearity. Therefore, when it comes to having a signed and ratified Avoidance of Double Taxation on Income Agreement (DTA), we observe that the UAE has lesser prospects to do trade with the Sub Saharan Africa when having a signed and ratified Avoidance of Double Taxation on Income Agreement (DTA).

Next, we shall discuss having a signed and ratified Avoidance of Double Taxation on Income Agreement (DTA) as an economic diplomacy tool to boost investment flows between the UAE and the other countries and regions. We begin by looking at the effects of having a signed and ratified Avoidance of Double Taxation on Income Agreement (DTA) across all regions and countries and how it affects the flows of investment.

As shown in the tables of generated results as discussed in the previous chapter, having a signed and ratified Avoidance of Double Taxation on Income Agreement (DTA) plays an insignificant role in determining the flows of investment between the UAE and the countries in various regions in the world. We do not have enough evidence that the total investments are related to having a signed and ratified Avoidance of Double Taxation on Income Agreement (DTA) between both the UAE and the other countries in the world (p-value=0.139).

However, when we tested each region separately, we noticed an insignificant effect of having a signed and ratified Avoidance of Double Taxation on Income Agreement (DTA) on the bilateral flow of foreign direct investments between the UAE and most of the regions in the world as the p-value was always above 5% and in some cases the variable was eliminated from the regression output due to collinearity issues. Interestingly, we have enough evidence that the avoidance of double taxation on income agreement has an adverse impact on the flow of foreign direct investments between the UAE and West Asia (p-value=0.021). Therefore, when it comes to having a signed and ratified Avoidance of Double Taxation on Income Agreement (DTA) we observe that the UAE has more prospects to grow the bilateral flow of investments with countries irrespective of having a signed and ratified Avoidance of Double Taxation on Income Agreement (DTA), except in West Asia where the agreement negatively impacts the flow of investments.

4.1.14 Having Signed and Ratified Investment Promotion and Protection Agreement (IPPA/BIT) as an Economic Diplomacy Tool to Boost Trade and Investment Flows

Last but not least, we shall discuss having signed, and ratified Investment Promotion and Protection Agreement (IPPA/BIT) as an economic diplomacy tool to boost trade

and investment flow between the UAE and the other countries and regions. We begin this discussion by looking at the effects of having signed and ratified Investment Promotion and Protection Agreement (IPPA/BIT) across all regions and countries and how it affects the flows of trade and investment.

Therefore, in the first part of this discussion subsection, we shall discuss how having signed, and ratified Investment Promotion and Protection Agreement (IPPA/BIT) affects the flows of trade between the United Arab Emirates and the other regions and countries. As shown in the results tables discussed in the previous chapter, having signed and ratified Investment Promotion and Protection Agreement (IPPA/BIT) has an insignificant role in determining the flows of trade between the UAE and the world. Thus, we do not have enough evidence that the total trade is irrelevant to have signed and ratified Investment Promotion and Protection Agreement (IPPA/BIT) between both the UAE and the other countries in the world (p-value=0.319).

However, when we tested each region separately, we arrived at other conclusions. We noticed a very high significance of the positive coefficient of the Investment Promotion and Protection Agreement (IPPA/BIT) variable in Sub-Saharan Africa (p-value=0.002) and East Asia (p-value=0). Interestingly though, we noticed that the Investment Promotion and Protection Agreement (IPPA/BIT) was negatively related to the total flow of bilateral trade with the Arab countries (p-value=0.022). We have also concluded that having the IPPA/BIT agreement has no relation with the flow of trade between the UAE and the rest of the regions as the p-value was higher than 5%.

Therefore, when it comes to the Investment Promotion and Protection Agreement (IPPA/BIT) we observe that the UAE has more prospects to make more trade with Sub-Saharan African, and East Asian countries that it has signed and ratified

Investment Promotion and Protection Agreement (IPPA/BIT) with, simply due to the trade facilitation incentives that this agreement brings to traders from both sides. This ultimately translates to prospective ease of flow of the goods and services that are being traded between both the UAE and the other country.

Therefore, its positive impact on the flow of trade with Africa, and East Asia is commendable and should be taken into consideration when we assess the trade potential with any country within those regions. That being said, we emphasize also on the higher prospects of having signed and ratified Investment Promotion and Protection Agreement (IPPA/BIT) with African countries, and East Asian countries due to the highly positive relationship that eventually is reflected on the magnitude of the trade possibilities and transactions that could be executed and ultimately boosting the overall non-oil bilateral trade of the UAE. Next, we shall discuss having signed, and ratified Investment Promotion and Protection Agreement (IPPA/BIT) as an economic diplomacy tool to boost investment flow between the UAE and the other countries and regions.

We begin by looking at the effects of having signed and ratified Investment Promotion and Protection Agreement (IPPA/BIT) across all regions and countries and how it affects the flows of investment. As shown in the results tables discussed in the previous chapter, having signed and ratified Investment Promotion and Protection Agreement (IPPA/BIT) similar to the case in the Trade Model, plays an insignificant role in determining the flows of investment between the UAE and the countries in various regions in the world. Thus, we do not have enough evidence that the total flow of foreign direct investments is related to having signed and ratified Investment Promotion and Protection Agreement (IPPA/BIT) between both the UAE and the other

countries in the world (p-value=0.407). However, when we tested each geographical region separately, the regression output revealed a significant negative coefficient of the Investment Promotion and Protection Agreement (IPPA/BIT) variable in East Asia (p-value=0.040) and West Asia (p-value=0.021).

We have also concluded that having signed and ratified Investment Promotion and Protection Agreement (IPPA/BIT) between the UAE and the rest of the regions in the world has no relation with the flow of foreign direct investments between the UAE and these regions as the p-value is more than 5%. Therefore, when it comes to having signed and ratified Investment Promotion and Protection Agreement (IPPA/BIT) we observe that the UAE has lesser prospects to grow the bilateral flow of investments with East and West Asian countries that it has a signed and ratified Investment Promotion and Protection Agreement (IPPA/BIT) despite the fact that this variable reflects confidence building for investors to protect their capitals and repatriation of their profit proceedings as well as other non-discriminative measures granted to foreign investors in both sides.

4.2 Economic Diplomacy Policy Recommendations

In this sub-section of the dissertation, we shall shed light on the recommendations for policymakers to use the right economic diplomacy tools with each region of the world and determine the most suitable way forward that provides the most positive impact on the flow of bilateral non-oil trade and foreign direct investments between the UAE and countries in these regions. We shall discuss the regions in alphabetical order.

4.2.1 Africa

As a policy recommendation, the African region entails a potential in both bilateral non-oil trade as well as the bilateral flow of foreign direct investments. As for the recommendation to boost bilateral trade between the UAE and Africa, we recommend using specific economic diplomacy tools which have been shown to have a significant positive impact on the bilateral non-oil trade. First, we recommend signing and ratifying the Investment Promotion and Protection Agreement (IPPA/BIT) with African countries which have been contributing positively to the bilateral total non-oil trade flow between the UAE and Africa. Second, the policymakers should target African countries that have higher gross domestic product per capita and are larger in terms of the size of a population due to the high significance of these factors in boosting the bilateral non-oil trade with Africa.

In terms of the economic diplomacy tools that are effective with African countries to boost the overall foreign direct investments, no economic diplomacy tool has been used in our augmented gravity model that showed any significance in boosting the foreign direct investments between the UAE and African countries. In conclusion, as shown in our model output, economic diplomacy tools seem to be more effective in the boosting the trade only with Africa, and thus the recommendation is to focus on Trade with African countries although investments can be boosted and successful with African countries through other factors that are not included in this research.

4.2.2 Arab Countries

Moving to the Arab countries and as a policy, the region entails a potential in both bilateral non-oil trade as well as the bilateral flow of foreign direct investments. As for the recommendation to boost bilateral trade between the UAE and Arab countries, I

recommend using specific economic diplomacy tools which have been shown to have a significant positive impact on the bilateral non-oil trade. First, the Investment Promotion and Protection Agreement (IPPA/BIT) should be avoided as it has an adverse impact on trade. However, the other economic agreements namely the Avoidance of Double Taxation on Income (DTA), and the Free Trade Agreement (FTA) are insignificant for boosting the bilateral trade.

The policymakers should target Arab countries that have higher gross domestic product per capita and are larger in terms of the size of a population due to the high significance of these factors in boosting the bilateral non-oil trade with Arab countries. In terms of the economic diplomacy tools that are effective with Arab countries to boost the overall foreign direct investments, no economic diplomacy tool has been used in our augmented gravity model that showed any significance in boosting the foreign direct investments between the UAE and Arab countries. However, Arab countries that are higher in nominal GDP tend to have more investment flows with the UAE.

In conclusion, as shown in our model output, economic diplomacy tools in our model seem not to be significant in boosting the trade and investments flows with the Arab countries and thus the recommendation is to focus on Trade with the Arab countries that are high in gross domestic product per capita and are more abundant in population size.

4.2.3 Australasia

This region entails a potential in both bilateral non-oil trade as well as the bilateral flow of foreign direct investments. As for the recommendation to boost bilateral trade

between the UAE and Australasia, we recommend using specific economic diplomacy tools which have been shown to have a significant positive impact on the bilateral non-oil trade. I recommend that the policymakers target countries in Australasia that have a higher population and large in terms of size in kilometre square as well as those countries that are farther from the UAE in the distance in kilometres due to the high significance of these factors in boosting the bilateral non-oil trade with Australasia. However, the economic agreements and diplomatic missions do not have a significant effect on the bilateral non-oil trade.

In terms of the economic diplomacy tools that are effective with Australasia countries to boost the overall foreign direct investments, no economic diplomacy tool has been used in our augmented gravity model that showed any significance in boosting the foreign direct investments between the UAE and Australasia countries. In conclusion, as shown in our model output, the country attributes of population, area and distance seem to be more effective in boosting the trade only with Australasia and thus the recommendation is to focus on Trade with Australasia countries although investments can be boosted and successful but are may be affected by other factors that are not included in this research.

4.2.4 Caribbean

As for the recommendation to boost bilateral trade between the UAE and the Caribbean. The policymakers should target Caribbean countries that have higher gross domestic product per capita, smaller in geographic size in square kilometres, farther in terms of distance and are larger in terms of the size of a population due to the high significance of these factors in boosting the bilateral non-oil trade with the Caribbean.

In terms of the economic diplomacy tools that are effective with Caribbean countries to boost the overall foreign direct investments, there are no economic diplomacy tool that have been used in our augmented gravity model that showed any significance in boosting the foreign direct investments between the UAE and the Caribbean region as there have not been enough observations over the 18 years period from 1999-2017. In conclusion, as shown in our model output, there are no economic diplomacy tools that boost the trade and investments with the Caribbean region which may be boosted and successful by other factors that are not included in this research.

4.2.5 East Asia

As for the recommendation to boost bilateral trade between the UAE and East Asia, I recommend using specific economic diplomacy tools which have been shown to have a significant positive impact on the bilateral non-oil trade. First, I recommend signing and ratifying the Investment Promotion and Protection Agreement (IPPA/BIT) with East Asian countries which have been contributing positively to the bilateral total non-oil trade flow between the UAE and East Asia. Also, East Asian countries should be encouraged and even supported to open missions in the UAE and even increase the number of their embassies and consulates as it has been proven that the more missions of East Asian countries in the UAE, the higher the bilateral non-oil trade is between them and the UAE. Moreover, the policymakers should target East Asian countries that have higher gross domestic product per capita and are larger in terms of the size of a population due to the high significance of these factors in boosting the bilateral non-oil trade with East Asia.

In terms of the economic diplomacy tools that are effective with East Asian countries to boost the overall foreign direct investments, there are several economic diplomacy

tools that have been used in our augmented gravity model and showed moderate to high significance in boosting the foreign direct investments between the UAE and East Asian countries. Having a signed and ratified Free Trade Agreement (FTA) with East Asian countries have been proven to enhance the flows of bilateral foreign direct investments both ways. Moreover, a critical factor that policymakers should take into consideration when assessing the potential with East Asian countries is the gross domestic product which as it goes higher in both the UAE and East Asian countries, it tends to boost the flow of bilateral foreign direct investments both ways.

In conclusion, as shown in our model output, economic diplomacy tools have been shown to be effective in the boosting the trade with East Asia, and thus the recommendation is to focus on both Trade and Investment enablers, determinants and economic diplomacy tools with East Asian countries, although investments can also be boosted and successful by other factors that may not have been included in this dissertation.

4.2.6 Europe

In terms of the recommendation to boost bilateral trade between the UAE and Europe, I encourage using specific economic diplomacy tools which have been shown to have a significant positive impact on the bilateral non-oil trade. I also recommend signing and ratifying a Free Trade Agreement (FTA) with European countries as it has a significant positive impact on trade and shall result in enhancing the bilateral non-oil trade between the UAE and Europe. Also, policymakers and traders too should consider focusing on the European countries which have higher gross domestic product per capita and are larger in terms of the size of a population due to the high significance of these factors in boosting the bilateral non-oil trade with Europe. In

terms of the economic diplomacy tools that are effective with Europe countries to boost the overall foreign direct investments, no economic diplomacy tool has been used in our augmented gravity model that boost the foreign direct investments between the UAE and European countries.

In conclusion, as shown in our model output, economic diplomacy tools have been shown to be effective in the boosting the trade with Europe, and thus the recommendation is to focus on Trade enablers, determinants and economic diplomacy tools with European countries, although investments can also be boosted and successful by other factors that may not have been included in this dissertation.

4.2.7 Gulf Cooperation Council (GCC)

As for the recommendation to boost bilateral trade between the UAE and the members of GCC, I recommend using specific economic diplomacy tools which have been shown to have a significant positive impact on the bilateral non-oil trade. First, I recommend that the policymakers and business people to target GCC states that have higher gross domestic product per capita and are larger in terms of the size of population, in addition to those countries that have shared borders with the UAE namely, Saudi Arabia and the Sultanate of Oman, due to the high significance of these factors in boosting the bilateral non-oil trade with the GCC states. Being an Island in the GCC states should be a plus when assessing the trade potential between this country and the UAE. Second, I recommend increasing the number of Gulf Cooperation Council missions in the UAE namely the consulates as it has a highly significant positive impact on the overall flow of bilateral non-oil trade.

In terms of the economic diplomacy tools that are effective with Gulf Cooperation Council (GCC) countries to boost the overall foreign direct investments, there are no economic diplomacy tool that have been used in our augmented gravity model that showed any significance in boosting the foreign direct investments between the UAE and Gulf Cooperation Council (GCC) countries. However, I recommend that policymaker and investors to consider those Gulf Cooperation Council (GCC) which have a higher gross domestic product as this is the only factor has been proven to enhance the bilateral flow of foreign direct investments with the Gulf Cooperation Council (GCC) countries.

In conclusion, as shown in our model output, economic diplomacy tools are proven to be effective in boosting the trade and investment with the Gulf Cooperation Council (GCC) countries and thus the recommendation is to continue focusing on Trade and investment with Gulf Cooperation Council (GCC) countries although both can be boosted and successful more factors that are not included in this research.

4.2.8 North America

As a policy recommendation and spawning from the results in chapter 4 and discussion in chapter 5, the North American region is shown to entail a potential in both bilateral non-oil trade, but a lesser potential in the bilateral flow of foreign direct investments. As for the recommendation to boost bilateral trade between the UAE and North America, we recommend using specific economic diplomacy tools which have been shown to have a significant positive impact on the bilateral non-oil trade.

As proven empirically, the policymakers should target North American countries that have higher gross domestic product per capita and are larger in terms of the size of a

population due to the high significance of these factors in boosting the bilateral non-oil trade with North America. Moreover, being previously colonised is a decisive factor that should be considered as it has been proven to boost the bilateral trade between the United Arab Emirates and North American Countries. In terms of the economic diplomacy tools that are effective with North American countries to boost the overall foreign direct investments, no economic diplomacy tool has been used in our augmented gravity model which showed any significance in boosting the foreign direct investments between the UAE and North American countries.

In conclusion, as shown in our model output, economic diplomacy tools seem to be less effective in boosting the trade with North America, while the attributes of the gross domestic product per capita, being colonized, and the size of the population are the only factors that when they are higher, they tend to positively boost the bilateral flow of non-oil trade between the UAE and North America. Thus the recommendation is to focus on Trade with North American countries although investments can be boosted and successful, it may be affected by other factors that are not included in this research.

4.2.9 Pacific

I recommend looking at specific attributes which have been shown to have a significant positive impact on the bilateral non-oil trade. I recommend targeting the Pacific Islands that are larger in terms of the size of a population due to the high significance of this factor in boosting the bilateral non-oil trade with the Pacific. However, the more distant the Pacific country, the more negative impact we observed in the total flow of trade between both sides, moreover the larger the Pacific country in terms of area in square kilometres, also the lesser the total bilateral non-oil trade between them and the UAE.

In terms of the economic diplomacy tools that are effective with the Pacific countries to boost the overall foreign direct investments, there are no economic diplomacy tool that have been used in our augmented gravity model that showed any significance in boosting the foreign direct investments between the UAE and Pacific countries, mainly because there have been insufficient observations of the flow of investment over the 18 years between 1999 and 2016.

In conclusion, as shown in our model output, economic diplomacy tools seem to be less effective in boosting the trade with the Pacific region and thus the recommendation is to still focus on Trade and investments with Pacific countries although trade and investments can be boosted and successful but are may be affected by other factors that are not included in this research.

4.2.10 South America

In this sub-section, as a policy recommendation for South America and building on the results in chapter 4 and discussion in chapter 5, the South America region entails a potential in both bilateral non-oil trade as well as the bilateral flow of foreign direct investments. As for the recommendation to boost bilateral trade between the UAE and South America, I recommend using specific economic attributes which have been shown to have a significant positive impact on the bilateral non-oil trade.

So, I recommend those policymakers and businessmen to consider focusing on the South American countries which have higher gross domestic product per capita, countries that have been previously colonized, and those that are larger in terms of the size of population due to the high significance of these factors in boosting the bilateral non-oil trade with South America. However, policymakers and traders should take into

consideration that the farther in terms of distance the South American country is from the UAE, the more negative impact that has in hindering the flow of the total non-oil bilateral trade between both sides.

In terms of the economic diplomacy tools that are effective with South America countries to boost the overall foreign direct investments, no economic diplomacy tool has been used in our augmented gravity model that boost the foreign direct investments between the UAE and South American countries. However, the more embassies and consulates in the UAE from South America, the lesser the flow of investments. Similarly, being a landlocked country in South America is proven to hinder the flow of foreign direct investments between the UAE and this region.

In conclusion, as shown in our model output, economic diplomacy tools have been shown to be lesser effective in boosting the trade and investments with South America, and thus the recommendation is to focus on Trade and investment determinants with South American countries, although trade and investments can also be boosted and successful by other factors that may not have been included in this research.

4.2.11 West Asia

Finally, the recommendation to boost bilateral trade between the UAE and West Asia is that, first, policymakers and businessmen should consider focusing on the West Asian countries which are landlocked geographically, and those that have higher gross domestic product per capita and are larger in terms of the size of population due to the high significance of these factors in boosting the bilateral non-oil trade with West Asia. Being historically colonised is also an essential factor in the trade relations between

the UAE and West Asia, as it is evident that being ever colonised affects the bilateral flow of non-oil trade between the UAE and West Asia positively.

However, some attributes affect the bilateral trade negatively with West Asian countries. The larger the west Asian country in area in square kilometres, the lesser bilateral non-oil trade flows is shown with the United Arab Emirates. Moreover, the more distant the West Asian country is the more negative impact that imposes on the overall total flow of non-oil bilateral trade between the United Arab Emirates and West Asia. In terms of the economic diplomacy tools that are effective with West Asian countries to boost the overall foreign direct investments, no economic diplomacy tool has been shown in our augmented gravity model to have significance in affecting the foreign direct investments between the UAE and West Asian countries.

As it has been evident in our results, The United Arab Emirates should consider limiting the number of West Asian countries missions in the UAE as well as the number of representative consulates of the those countries as this has been proven to adversely affect the bilateral flow of foreign direct investments between the United Arab Emirates and West Asia. Moreover, The Avoidance of Double Taxation on Income has been proved to negatively impact the flow of investments between the United Arab Emirates and this region. Thus, the recommendation is to hinder the efforts to sign this agreement with countries within this region.

In conclusion, as shown in our model output, economic diplomacy tools are effective only in hindering the investments with West Asia. Thus, the recommendation is to focus on trade enablers and determinants with West Asian countries. As the economic diplomacy tools used in our model, it seemed to negatively affect investments especially those related to foreign diplomatic missions of West Asian countries in the

UAE and ratifying the Avoidance of Double Taxation on Income Agreement (DTA) although investments could be boosted and successful by other factors and economic diplomacy tools that may not have been included in this research.

Chapter 5: Conclusion

All in All, the purpose of this dissertation is to examine the impact of some of the Economic Diplomacy tools used in the UAE Foreign Policy on the flow of the bilateral foreign investments and non-oil trade.

The objectives of this dissertation are to assess the effectiveness of the Economic Diplomacy tools in delivering the desired outcomes on trade and investment and ultimately on the political bilateral and multilateral weight of the UAE, as well as to examine the inter-relationship between the desired trade and investment outcomes and the agreements either bilateral or Free Trade Agreements signed on a multilateral level through the GCC and their impact on the flow of trade and investments.

Towards this end, the dissertation provides a set of criteria and recommendations to be used to successfully evaluate initiatives towards boosting the flow of investments and trade, where the foreign policy can contribute further to the economic development and prosperity of the UAE, in line with what Young (2017a) has also discussed. The dissertation also built on the arguments made by Moons and van Bergeijk (2016) by providing the means by which new markets can be opened, identify and remove trade and investment impediments, attract new investments and the use of multi-country systems such as Free Trade Agreements as also described by Selmier and Oh (2013). Meanwhile, in comparison with the argument made by Lee (2010), this dissertation affirms that economic diplomacy combines the role of diplomats as international relations agents and as international political economists, moreover diplomacy caters a holistic set of social, economic, political and cultural factors that also contribute to the flow of trade and investments.

Theoretically, and in between the two schools of thought, namely realist theories described by Gowa and Mansfield (1993) and liberalism theories discussed by Moravcsik (2001), this dissertation leans more towards the realist theories which argue that the foreign political agenda drives the international flow of trade. Although, eventually the dissertation agrees with Gawarkiewicz and Tang (2017) that the relationship between politics and trade is far more complex and involves other factors that the dissertation might not have covered. Similarly, the research agrees with Gawarkiewicz and Tang (2017) that the quality of the government in the host country and the political relations affect the flow of investments too. A key finding affirmed by this dissertation is the need to explore further the impact of embassies, consulates and trade offices in facilitating and promoting trade and investments, in line with the arguments made by Saner and Yiu (2003) while tailored explicitly to the United Arab Emirates.

The study reaffirmed that the use of the gravity model in applied research of bilateral trade and investment is theoretically justified. It has citations of a wide range of applied research where the gravity model is applied to examine the bilateral trade and investment patterns and relationship. The gravity model used, which was developed for trade, was developed similar to the model used by Yakop and van Bergeijk (2011) while the investment gravity model was based on Gawarkiewicz and Tang (2017) model with modified variables taking into consideration the work of Rahman (2003), and Batra (2006) in order to compare and contrast those variables effects on both investment and trade for the case of the UAE. The data was collected from various sources and reflect the amounts of trade and investment over 18 years from 1999 till 2016. The econometric issues have been checked and found that the generalised

gravity model fits the data. Also, the Fixed and Random effects were tested, but due to time-invariant variables, the Random Effects Generalized Least Square Regression with robust standard errors was conducted in this research.

The key findings drawn from this dissertation results outline several recommendations to boost the bilateral trade and investments with various regions in the world. Each economic diplomacy tool, country attributes and trade and investment enablers were tested to identify the best tools to be used in which region. Moreover, several recommendations were to avoid using specific tools in some regions due to their negative impact on either trade or investments. A key argument here is that although the econometrics results show that many economic diplomacy tools were statistically insignificant, these tools might not have been used effectively nor properly which opens a new area of research to test for. Moreover, the negative impact of some tools may be explained by other arguments such as other micro- and macroeconomic, socio-economic and demographic factors beyond this dissertation.

An important finding is the empirically proven insignificant of having embassies, missions, and consulates due to their limited and statistically insignificant role in boosting the trade and investments in many regions while having negative and positive effects in only five regions namely Africa (Negative), East Asia (Positive), Gulf Cooperation Council (Positive), South America (Negative) and West Asia (Negative). Therefore, it is an interesting area of research to explore further their impact on the bilateral trade and investments and the intrinsic and extrinsic factors affecting their effects on trade and investments.

The results also show that the United Arab Emirates' significant trade determinants are: the Gross Domestic Product per Capita, the size of the population, and having a

common language, i.e. Arabic. All three factors affect the United Arab Emirates' trade positively. Meanwhile, the results also show that the major determinants of foreign direct investments are: the Nominal Gross Domestic Product and the size of the population, and having a common language, these three factors affect the United Arab Emirates' foreign direct investments positively flow both ways.

Regionally, the estimates of the United Arab Emirates' global trade potential reveal that the potential of the total bilateral non-oil trade is high with the East Asia region, followed by the Gulf Cooperation Council, Europe, and African counties. While the investment was affected by the economic diplomacy tools mainly in East Asia region only. In addition, and looking at the analysis made by Okano-Heijmans (2010) on Japans economic diplomacy tools, this dissertation adds on it that the economic agreements, namely the Free Trade Agreements, the Investment Promotion and Protection Agreement (IPPA/BIT) and the Avoidance of Double Taxation on Income (DTA) also have an evident impact on trade and investments of the UAE in different magnitudes and ways with every region of the world. However, this dissertation showed that in some regions the agreements boost trade and investments, while in other regions they negatively impact the trade and investments, while sometimes they merely are statistically insignificant.

The irrelevant and negative results discussed in Chapter 4 – Discussion especially those of the UAE Embassies and foreign embassies entails future in-depth studies to identify the intrinsic and extrinsic factors that may have caused these effects. In the meantime, it would be essential to look at the budgets, several people and the qualification of the staff at each embassy or mission to best assign personnel to the right missions in order to achieve the desired outcomes. Moreover, the dissertation

also suggests providing specialised training programs for diplomats in specific technical areas that will enable them to do their jobs effectively and efficiently towards the goals and objectives sat to them.

The dissertation also adds to the emphasis on the importance of investing in logistics and transport to overcome the negative effect of distance and large-sized countries in square kilometres, as Almezaini (2012) argued that the United Arab Emirates enjoys an advantageous geographical location thus acting as a bridge from the west to the east and vice versa. The results also offer indirect support for the emerging empirical literature on new and intangible barriers or enablers to trade and investments. Indeed, in the findings, higher income countries tend to have more flow of trade and investment with the UAE, and most of those have shown a positive impact of having embassies and trade offices and sign agreements with, this is another corroboration of the role economic diplomacy plays. Typically, the low volumes of trade and investments with the Caribbean and Pacific islands are mainly linked with the limited infrastructure, connectivity and trade facilitation as well as lack of data availability.

This analysis adds a new element to that discussion namely the need to establish foreign embassies from these regions in the United Arab Emirates in order to establish a good political relationship that breeds trust as an important trade and investment facilitator. Moreover, when it comes to the UAE Vision 2021 (2010) which states that knowledgeable and innovative Emiratis will confidently build a competitive and resilient economy. Towards this end, several sectors shall benefit from the enhanced flow of bilateral non-oil trade as well as foreign direct investments. First of all, job creation is a crucial element that shall contribute to the UAE Vision 2021 by harnessing the full potential of the UAE Nationals in the economy.

It shall also contribute in sustaining the UAE's drive towards economic diversification through expanding to new strategic sectors to channel the UAE national's energies towards industries and services that shall provide a long-term competitive advantage to the UAE. As innovation, research, science and technology will build the pillars of the UAE knowledge-based economy, the new investments and ventures will provide a greater opportunity to create a generation of entrepreneurs that shall excel the partnership between the public and private sectors towards the productive and efficient economy. The sectors of infrastructure, logistics, fast-moving consumers goods, information and communication technologies, FinTech, Block-Chain technologies, industries, innovation and services shall include the main drivers and thus recipients of the majority of investments in the coming years.

In conclusion, this research provided new sets of policy recommendations for the United Arab Emirates use Economic Diplomacy tools in its foreign policy and its effects on the overall trade and investment. In addition to the findings above, this dissertation opened up several questions for future investigation and research. One of these questions is to examine the reasons why some economic diplomacy tools are more important or significant than the others. More arguments can also be examined as a continuation from this research such as testing the importance and significance of the geopolitical factors that may antagonise and obfuscate the economic diplomacy tools impact on the bilateral non-oil trade and flow of foreign direct investments.

Moreover, it would also be of interest to test the efficiency within the economic diplomacy agents namely diplomats, trade consular, officers and others and their role in executing the various tools. Their effects should be looked at to determine whether the use of these tools have been successful or other ways of implementation could

impact the outcomes in more significant ways. These broad prospects of research are only a small fraction of the potential possibilities that can be looked at. The growing use of economic diplomacy worldwide and the systemizing of its implementation is a rich area of research for academics. As the potential is high and the prospects are wide, this research is a stepping stone for more research about the United Arab Emirates Economic Diplomacy.

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Appendix

Table 1: Variables Descriptions and Data Sources

Model	Variable	Description	Source	Expected Sign	
				Trade	Investment
Both	D ij	the distance between country i and country j measured between the two latitude-longitude combinations	GPS coordinates Distance between both capitals	Negative	Negative
Trade only	Yi*Yj	the GDP per capital PPP – Purchase Power Parity - in US Dollars for each country i and j for a given year, multiplied to avoid collinearity	The Economist Intelligence Unit	Positive	Positive
Investment Only	GDPi*GDPj	the nominaly GDP in US Dollars for each country i and j for a given year, multiplied to avoid collinearity	The Economist Intelligence Unit	Positive	Positive
Both	Pop i * Pop j	Denotes the average population of countries I and j for a given year	The Economist Intelligence Unit	Positive	Positive
Both	Area i * Area j	The area of the country in square kilometers	CIA World Fact Book 2018	Negative	Negative
Both	EmbCon ij	Denotes the number of embassies and consulates of each country I and j that have been established in both countries at any point in time	UAE Ministry of Foreign Affairs and International Cooperation	Positive	Positive
Both	EmbCon ji			Positive	Positive
Both	LandLocked	The variable is binary in nature and denotes whether country j is landlocked or not	CIA World Fact Book 2018	Negative	Negative
Both	Island	The variable is binary in nature and denotes whether country j is an island or not	CIA World Fact Book 2018	Negative	Negative
Both	Language	The variable is binary in nature and denotes whether countries i and j share a common language or not	CIA World Fact Book 2018	Positive	Positive
Both	BorderShare	The variable is binary in nature and denotes whether countries i and j share borders together	Google Inc	Positive	Positive
Both	Colonized	the variable is binary in nature and denotes whether country i and j have been both colonized or not	CIA World Fact Book 2018	Positive	Positive
Both	FTA ij	the variable is binary in nature and denotes whether a Free Trade Agreement is in place between countries i and j. We only included Free Trade Agreements that are signed, ratified and are currently in effect	UAE Ministry of Economy	Positive	Positive
Both	BIT ij	the variable is binary in nature and denotes whether a Protection and Promotion of Investment Agreement is in place between countries i and j. We only included Protection and Promotion of Investment Agreements that are signed, ratified and are currently in effect	UAE Ministry of Finance	Positive	Positive
Both	DTA ij	the variable is binary in nature and denotes whether the Avoidance of Double Taxation on Income Agreement is in place between countries i and j. We only included Avoidance of Double Taxation on Income Agreements that are signed, ratified and are currently in effect	UAE Ministry of Finance	Positive	Positive
Both	ε ij	Error term	N/A	Not Applicable	

Table 2: Summary Statistics

Trade Summary Statistics

Variable		Mean	Std. Dev.	Min	Max	Observations	
YjxYi	overall	20.11095	1.214096	16.73117	22.94564	N =	3330
	between		1.196696	17.50648	22.77359	n =	185
	within		0.2219523	17.88109	20.94931	T =	18
PopixPopj	overall	3.537511	2.137514	-3.566308	9.449656	N =	3330
	between		2.083991	-2.800994	8.94152	n =	185
	within		0.4981207	2.10731	4.745625	T =	18
AreaixAreaj	overall	3.117195	0.1185967	2.690225	3.330245	N =	3330
	between		0.1189006	2.690225	3.330245	n =	185
	within		0	3.117195	3.117195	T =	18
Distance	overall	8.577107	0.7260946	5.70711	9.656371	N =	3330
	between		0.7279557	5.70711	9.656371	n =	185
	within		0	8.577107	8.577107	T =	18
Language	overall	0.1081081	0.3105635	0	1	N =	3330
	between		0.3113596	0	1	n =	185
	within		0	0.1081081	0.1081081	T =	18
BorderShare	overall	0.0108108	0.103427	0	1	N =	3330
	between		0.1036921	0	1	n =	185
	within		0	0.0108108	0.0108108	T =	18
Landlocked	overall	0.2108108	0.4079456	0	1	N =	3330
	between		0.4089912	0	1	n =	185
	within		0	0.2108108	0.2108108	T =	18
Island	overall	0.2486486	0.4322946	0	1	N =	3330
	between		0.4334026	0	1	n =	185
	within		0	0.2486486	0.2486486	T =	18
Colonized	overall	0.9837838	0.1263251	0	1	N =	3330
	between		0.1266489	0	1	n =	185
	within		0	0.9837838	0.9837838	T =	18
FTA	overall	0.090991	0.2876395	0	1	N =	3330
	between		0.2788847	0	1	n =	185
	within		0.0731913	-0.409009	0.6465465	T =	18
BIT	overall	0.1531532	0.3601892	0	1	N =	3330
	between		0.3253898	0	1	n =	185
	within		0.1561998	-0.7912913	1.097598	T =	18
DTA	overall	0.2258258	0.4181878	0	1	N =	3330
	between		0.3426443	0	1	n =	185
	within		0.2409886	-0.7186186	1.17027	T =	18
EmbConji	overall	0.7105105	0.8439227	0	2	N =	3330
	between		0.8155179	0	2	n =	185
	within		0.224794	-0.7894895	2.266066	T =	18
EmbConij	overall	0.3408408	0.5182595	0	4	N =	3330
	between		0.4738821	0	2.444444	n =	185
	within		0.212545	-1.103604	1.896396	T =	18

Table 2: Summary Statistics (Continued)

Investment Summary Statistics

Variable		Mean	Std. Dev.	Min	Max	Observations
GDPixGDPj	overall	8.446108	2.591017	0.2949476	15.76524	N = 3303
	between		2.396202	1.787463	14.91218	n = 184
	within		1.00121	5.136541	10.26181	T-bar = 17.9511
POPixPOPj	overall	3.533987	2.142548	-3.566308	9.449656	N = 3312
	between		2.089124	-2.800994	8.94152	n = 184
	within		0.4984755	2.103787	4.742101	T = 18
AREAi x AREAj	overall	22.73519	2.553801	14.735	27.94518	N = 3312
	between		2.560382	14.735	27.94518	n = 184
	within		5.93E-15	22.73519	22.73519	T = 18
Distance	overall	6580.25	4064.74	301	15621	N = 3312
	between		4075.216	301	15621	n = 184
	within		0	6580.25	6580.25	T = 18
Language	overall	0.1086957	0.311304	0	1	N = 3312
	between		0.3121062	0	1	n = 184
	within		0	0.1086957	0.1086957	T = 18
Bordershare	overall	0.0108696	0.1037047	0	1	N = 3312
	between		0.103972	0	1	n = 184
	within		0	0.0108696	0.0108696	T = 18
Landlocked	overall	0.2119565	0.4087559	0	1	N = 3312
	between		0.4098093	0	1	n = 184
	within		0	0.2119565	0.2119565	T = 18
Island	overall	0.2445652	0.429894	0	1	N = 3312
	between		0.4310019	0	1	n = 184
	within		0	0.2445652	0.2445652	T = 18
Colonized	overall	0.9836957	0.1266624	0	1	N = 3312
	between		0.1269888	0	1	n = 184
	within		0	0.9836957	0.9836957	T = 18
FTA	overall	0.0914855	0.2883418	0	1	N = 3312
	between		0.2795643	0	1	n = 184
	within		0.07339	-0.4085145	0.6470411	T = 18
BIT	overall	0.1539855	0.3609894	0	1	N = 3312
	between		0.3260801	0	1	n = 184
	within		0.1566238	-0.7904589	1.09843	T = 18
DTA	overall	0.2270531	0.4189905	0	1	N = 3312
	between		0.3431712	0	1	n = 184
	within		0.2416428	-0.7173913	1.171498	T = 18
EmbConji	overall	0.714372	0.8445816	0	2	N = 3312
	between		0.8160454	0	2	n = 184
	within		0.2254042	-0.785628	2.269928	T = 18
EmbConij	overall	0.3420894	0.5188715	0	4	N = 3312
	between		0.4748699	0	2.444444	n = 184
	within		0.2118586	-1.102355	1.897645	T = 18

Table 3: Normality Tests- Shapiro-Wilk W Test for Normal Data, and Skewness/Kurtosis Normality Test

Shapiro-Wilk W test for normal data

Variable	Obs	W	V	z	Prob>z
_TotalTrade	3,156	0.97723	40.832	9.589	0.00000
YjxYi	3,330	0.98222	33.474	9.092	0.00000
PopixPopj	3,330	0.98494	28.349	8.661	0.00000
AreaixAreaj	3,330	0.92218	146.477	12.914	0.00000
Distance	3,330	0.92674	137.889	12.758	0.00000
Language	3,330	0.99515	9.136	5.729	0.00000
BorderShare	3,330	0.94655	100.613	11.942	0.00000
Landlocked	3,330	0.99822	3.356	3.135	0.00086
Island	3,330	0.99873	2.389	2.255	0.01207
Colonized	3,330	0.96479	66.269	10.860	0.00000
FTA	3,330	0.99401	11.274	6.273	0.00000
BIT	3,330	0.99697	5.699	4.507	0.00000
DTA	3,330	0.99844	2.934	2.788	0.00266
EmbConji	3,330	0.99648	6.624	4.896	0.00000
EmbConij	3,330	0.98635	25.697	8.407	0.00000

Note: The normal approximation to the sampling distribution of W' is valid for 4<=n<=2000.

Table 4: Kurtosis and Skewness Data

stats	e	Distance	Yi * Yj	Pop i * Pop j	Area i * Area j	Language	Island	BIT	DTA	EmbCon ji	EmbCon ij
sd	1.880148	0.726095	1.214096	2.137514	0.118597	0.310564	0.432295	0.360189	0.418188	0.843923	0.51826
variance	3.534957	0.527213	1.47403	4.568965	0.014065	0.09645	0.186879	0.129736	0.174881	0.712206	0.268593
se(mean)	0.033468	0.012583	0.021039	0.037041	0.002055	0.005382	0.007491	0.006242	0.007247	0.014625	0.008981
skewness	-0.35739	-0.92169	-0.13709	-0.41163	-1.01413	2.524126	1.163045	1.926204	1.311446	0.587762	1.279564
kurtosis	4.282153	4.819603	2.171809	3.169402	3.745751	7.371212	2.352674	4.710263	2.71989	1.656348	4.583815

Table 5: Simple Correlation

	Total Trade	Distance	Yi * Yj	Pop i * Pop j	Area i * Area j	Language	BorderShare	Landlocked	Island	Colonized	FTA	BIT	DTA	EmbCon	UAEEmbCon
Total Trade	1														
Distance	-0.4349	1													
Yi * Yj	0.3497	-0.0488	1												
Pop i * Pop j	0.7007	-0.1456	-0.0559	1											
Area i * Area j	0.4503	-0.0802	-0.1375	0.7753	1										
Language	0.2408	-0.5201	0.0649	-0.002	0.0381	1									
BorderShare	0.1344	-0.3393	0.1468	0.0104	0.087	0.2994	1								
Landlocked	-0.1171	-0.1819	-0.2603	0.0046	0.1041	-0.1909	-0.0571	1							
Island	-0.281	0.2746	0.1395	-0.4214	-0.5472	-0.1059	-0.0575	-0.2848	1						
Colonized	0.0502	0.0536	0.0134	0.0145	-0.0161	0.0469	0.014	-0.1386	0.07	1					
FTA	0.2741	-0.4995	0.2077	0.0313	0.025	0.7966	0.3296	-0.1526	-0.084	0.0426	1				
BIT	0.3392	-0.2007	0.2116	0.2637	0.1481	0.1715	-0.047	0.0025	-0.1492	-0.057	0.2031	1			
DTA	0.4057	-0.1741	0.2385	0.3317	0.109	0.0924	-0.06	-0.0815	-0.0502	0.073	0.1364	0.5869	1		
EmbCon	0.6552	-0.414	0.3183	0.5439	0.3562	0.3991	0.1584	-0.1955	-0.161	0.0246	0.3832	0.4261	0.4436	1	
UAEEmbCon	0.6408	-0.3326	0.3374	0.5311	0.3333	0.3408	0.1316	-0.1707	-0.1389	0.0231	0.3848	0.3732	0.4245	0.7544	1

Table 6: Variance Inflation Factors

Trade *Investment*

Variable	VIF	1/VIF
Language	5.68	0.176090
FTA	4.63	0.215813
POPixPOPj	3.84	0.260289
AREAixAREAj	2.98	0.335381
GDPixGDPj	2.82	0.354218
Dij	2.74	0.365321
EmbConji	2.48	0.402486
EmbConij	1.88	0.533252
BIT	1.52	0.656156
BorderShare	1.52	0.659901
DTA	1.49	0.670937
Island	1.33	0.749547
Landlocked	1.31	0.764983
Colonized	1.10	0.910324
Mean VIF	2.52	

Variable	VIF	1/VIF
Pop i * Pop j	4.14	0.241359
Language	3.51	0.28458
Area i * Area j	3.34	0.299563
EmbCon ji	3.27	0.305693
FTA	3.12	0.320794
EmbCon ij	2.76	0.361681
Distance	2.03	0.493702
DTA	1.82	0.54867
BIT	1.7	0.586876
Island	1.7	0.589891
Yi * Yj	1.52	0.658251
Landlocked	1.43	0.69787
BorderShare	1.28	0.783078
Colonized	1.05	0.956629
Mean VIF	2.33	

Table 7: Breusch-Pagan/Cook-Weisberg Test for Heteroscedasticity

```
Breusch-Pagan / Cook-Weisberg test for heteroskedasticity
        Ho: Constant variance
        Variables: fitted values of _TotalTrade

        chi2(1)      =   453.73
        Prob > chi2  =   0.0000
```

Table 8: F-Test for Fixed Effects for both Trade and Investment Models

Trade Model:

```
note: AreaixAreaj omitted because of collinearity
note: Distance omitted because of collinearity
note: Language omitted because of collinearity
note: BorderShare omitted because of collinearity
note: Landlocked omitted because of collinearity
note: Island omitted because of collinearity
note: Colonized omitted because of collinearity

Fixed-effects (within) regression               Number of obs      =       3,156
Group variable: CountryCode                     Number of groups   =         185

R-sq:                                           Obs per group:
     within  = 0.6489                                         min =           4
     between = 0.6500                                         avg =        17.1
     overall = 0.5838                                         max =          18

                                                F(7,2964)          =      782.74
corr(u_i, Xb)  = -0.6736                        Prob > F           =      0.0000
```

_TotalTrade	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
YjxYi	.9905648	.0915391	10.82	0.000	.8110781	1.170051
PopixPopj	2.229011	.0411654	54.15	0.000	2.148296	2.309727
AreaixAreaj	0	(omitted)				
Distance	0	(omitted)				
Language	0	(omitted)				
BorderShare	0	(omitted)				
Landlocked	0	(omitted)				
Island	0	(omitted)				
Colonized	0	(omitted)				
FTA	-.2650316	.2166263	-1.22	0.221	-.6897847	.1597215
BIT	-.1346037	.1170405	-1.15	0.250	-.3640926	.0948852
DTA	-.1897876	.0771035	-2.46	0.014	-.3409694	-.0386059
EmbConji	-.0647174	.0807099	-0.80	0.423	-.2229705	.0935357
EmbConij	-.2715868	.0851949	-3.19	0.001	-.438634	-.1045397
_cons	-24.15006	1.769848	-13.65	0.000	-27.62031	-20.6798
sigma_u	2.6851144					
sigma_e	.90166601					
rho	.89866412	(fraction of variance due to u_i)				

```
F test that all u_i=0: F(184, 2964) = 55.68                     Prob > F = 0.0000
```

Table 8: F-Test for Fixed Effects for both Trade and Investment Models (Continued)

Investment Model:

```
note: AREAixAREAj omitted because of collinearity
note: Dij omitted because of collinearity
note: Language omitted because of collinearity
note: BorderShare omitted because of collinearity
note: Landlocked omitted because of collinearity
note: Island omitted because of collinearity
note: Colonized omitted because of collinearity

Fixed-effects (within) regression               Number of obs     =       907
Group variable: CountryCode                     Number of groups  =       126

R-sq:                                           Obs per group:
     within  = 0.0437                                         min =         1
     between = 0.0008                                         avg =       7.2
     overall = 0.0045                                         max =        14

                                                F(7,774)          =      5.05
corr(u_i, Xb)  = -0.6491                        Prob > F          =    0.0000
```

FDIjit	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
GDPixGDPj	.8727518	.2127788	4.10	0.000	.4550598	1.290444
POPixPOPj	-.7675498	.3769947	-2.04	0.042	-1.507603	-.0274964
AREAixAREAj	0	(omitted)				
Dij	0	(omitted)				
Language	0	(omitted)				
BorderShare	0	(omitted)				
Landlocked	0	(omitted)				
Island	0	(omitted)				
Colonized	0	(omitted)				
FTA	-.0814176	.4485356	-0.18	0.856	-.9619081	.7990728
BIT	-.5089888	.2785606	-1.83	0.068	-1.055813	.037835
DTA	-.1976996	.2223005	-0.89	0.374	-.6340829	.2386838
EmbConji	-.2052249	.3100476	-0.66	0.508	-.8138587	.4034089
EmbConij	-.0016075	.2195141	-0.01	0.994	-.432521	.429306
_cons	-.4907977	.9808287	-0.50	0.617	-2.416197	1.434602
sigma_u	1.7787641					
sigma_e	1.4078807					
rho	.61483133	(fraction of variance due to u_i)				

```
F test that all u_i=0: F(125, 774) = 4.06                     Prob > F = 0.0000
```

Table 9: Breusch-Pagan Lagrange Multiplier Test for Random Effects in the Trade Model and the Investment Model

Trade Model:

```
Breusch and Pagan Lagrangian multiplier test for random effects

        _TotalTrade[CountryCode,t] = Xb + u[CountryCode] + e[CountryCode,t]

        Estimated results:
                         |       Var     sd = sqrt(Var)
                ---------+------------------------------
                _TotalT~e|   11.04103       3.322804
                       e|   .8130016        .901666
                       u|   1.765309       1.328649

        Test:   Var(u) = 0
                                 chibar2(01) =  9031.33
                              Prob > chibar2 =   0.0000
```

Investment Model

```
    Breusch and Pagan Lagrangian multiplier test for random effects

          FDIjit[CountryCode,t] = Xb + u[CountryCode] + e[CountryCode,t]

          Estimated results:
                           |       Var     sd = sqrt(Var)
                  ---------+------------------------------
                    FDIjit |   3.541628       1.881921
                         e |   1.982128       1.407881
                         u |   .7259852       .8520476

          Test:   Var(u) = 0
                                   chibar2(01) =   190.58
                                Prob > chibar2 =   0.0000
```

Table 10: Hausman Test for the Trade Model and the Investment Model

Trade Model:

	Coefficients (b) random_group	(B) fixed_group	(b-B) Difference	sqrt(diag(V_b-V_B)) S.E.
YjxYi	1.076847	.9905648	.0862825	.
PopixPopj	2.092929	2.229011	-.1360819	.
FTA	-.2743938	-.2650316	-.0093622	.
BIT	-.1135125	-.1346037	.0210912	.
DTA	-.1481029	-.1897876	.0416847	.
EmbConji	-.1101366	-.0647174	-.0454192	.
EmbConij	-.2423501	-.2715868	.0292368	.

b = consistent under Ho and Ha; obtained from xtreg
B = inconsistent under Ha, efficient under Ho; obtained from xtreg

Test: Ho: difference in coefficients not systematic

chi2(7) = (b-B)'[(V_b-V_B)^(-1)](b-B)
= -196.16 chi2<0 ==> model fitted on these data fails to meet the asymptotic assumptions of the Hausman test; see suest for a generalized test

Investment Model:

	Coefficients (b) random_group	(B) fixed_group	(b-B) Difference	sqrt(diag(V_b-V_B)) S.E.
GDPixGDPj	.2608224	.8727518	-.6119294	.
POPixPOPj	.2359239	-.7675498	1.003474	.
FTA	-.1817276	-.0814176	-.10031	.
BIT	-.1660512	-.5089888	.3429376	.
DTA	-.2547306	-.1976996	-.057031	.
EmbConji	-.0475161	-.2052249	.1577088	.
EmbConij	.1429624	-.0016075	.1445698	.

b = consistent under Ho and Ha; obtained from xtreg
B = inconsistent under Ha, efficient under Ho; obtained from xtreg

Test: Ho: difference in coefficients not systematic

chi2(7) = (b-B)'[(V_b-V_B)^(-1)](b-B)
= -14.99 chi2<0 ==> model fitted on these data fails to meet the asymptotic assumptions of the Hausman test; see suest for a generalized test

Table 11: Empirical Results of the Random Effects GLS Regression of the Gravity Model of Bilateral non-Oil Trade Flow per Region (1999-2016)

Region	***Overall***	***Africa***	***Arab Countries***	***Australasia***
GDP Per Capita	1.07 *** *(0.06)*	1.51 *** *(0.13)*	0.93 *** *(0.15)*	- 1.29 ** *(0.56)*
Population	2.09 *** *(0.03)*	2.64 *** *(0.66)*	1.79 *** *(0.07)*	2.06 *** *(0.21)*
Area	- 13.53 *** *(1.18)*	- 22.12 *** *(2.67)*	- 10.95 *** *(3.88)*	63.12 *** *(14.61)*
Distance	- 1.07 *** *(0.18)*	- 0.47 *(0.72)*	- 0.78 *(0.49)*	29.39 *** *(5.18)*
Language	1.72 *** *(0.43)*	3.79 *** *(1.24)*	0 *(omitted)*	0 *(omitted)*
Border Sharing	- 0.31 *(1.06)*	0 *(omitted)*	0 *(omitted)*	0 *(omitted)*
Landlocked	0.03 *(0.28)*	- 0.69 *(0.42)*	0 *(omitted)*	0 *(omitted)*
Island	0.04 *(0.31)*	- 0.91 *(0.767)*	21.76 * *(12.2)*	0 *(omitted)*
Colonized	0.73 *(0.80)*	38.82 *** *(11.74)*	0 *(omitted)*	0 *(omitted)*
FTA	- 0.27 *(0.20)*	0 *(omitted)*	- 0.94 *(0.76)*	0 *(omitted)*
BIT	- 0.11 *(0.11)*	1.99 *** *(0.64)*	- 0.38 ** *(0.16)*	0 *(omitted)*
DTA	- 0.14 * *(0.07)*	- 0.55 ** *(0.25)*	- 0.16 *(0.17)*	0.03 *(0.41)*
Foreign Missions	- 0.11 *(0.07)*	- 0.64 *** *(0.15)*	0.11 *(0.29)*	0.34 *(0.38)*
UAE Missions	- 0.24 *** *(0.08)*	- 0.73 *** *(0.18)*	21.12 *(13.3)*	- 0.10 *(0.37)*
Constant	25.16 *** *(4.40)*	0 *(omitted)*	0 *(omitted)*	- 454.96 *** *(82.33)*
Overall R2	**0.72**	**0.61**	**0.63**	**0.95**

Note: ***,**,* implies significance at 99, 95 and 90% levels respectively. Standard Errors are reported in parenthesis.

Table 11: Empirical Results of the Random Effects GLS Regression of the Gravity Model of Bilateral non-Oil Trade Flow per Region (1999-2016) (Continued)

Region	***Carribean***		***East Asia***		***Europe***		***GCC***	
GDP Per Capita	*1.79* ***	*(0.40)*	*1.32* ***	*(0.14)*	*1.52* ***	*(0.11)*	*0.80* **	*(0.33)*
Population	*2.15* ***	*(0.20)*	*1.63* ***	*(0.10)*	*1.46* ***	*(0.07)*	*1.35* ***	*(0.05)*
Area	*- 27.39* ***	*(7.08)*	*- 11.83* ***	*(2.45)*	*- 8.76* ***	*(2.41)*	*- 20.0* ***	*(5.07)*
Distance	*42.62* ***	*(14.20)*	*- 2.65* **	*(1.10)*	*0.03*	*(0.77)*	*- 0.33*	*(0.31)*
Language	*0*	*(omitted)*	*0*	*(omitted)*	*0*	*(omitted)*	*0*	*(omitted)*
Border Sharing	*0*	*(omitted)*	*0*	*(omitted)*	*0*	*(omitted)*	*2.63* **	*(1.12)*
Landlocked	*0*	*(omitted)*	*- 0.63*	*(0.61)*	*- 0.23*	*(0.34)*	*0*	*(omitted)*
Island	*0.95*	*(1.25)*	*- 0.27*	*(0.48)*	*0.48*	*(0.47)*	*22.64* ***	*(4.29)*
Colonized	*- 361.19* ***	*(119.03)*	*0*	*(omitted)*	*- 1.01*	*(0.91)*	*0*	*(omitted)*
FTA	*0*	*(omitted)*	*- 1.64* ***	*(0.41)*	*0.46* ***	*(0.16)*	*0*	*(omitted)*
BIT	*0*	*(omitted)*	*1.15* ***	*(0.23)*	*0.21*	*(0.14)*	*0*	*(omitted)*
DTA	*0.48*	*(1.47)*	*- 0.11*	*(0.21)*	*0.10*	*(0.07)*	*0*	*(omitted)*
Foreign Missions	*0.99*	*(0.78)*	*0.53* **	*(0.24)*	*0.02*	*(0.11)*	*24.49* ***	*(4.82)*
UAE Missions	*- 0.31*	*(1.09)*	*- 0.17*	*(0.19)*	*- 0.03*	*(0.09)*	*0*	*(omitted)*
Constant	*0*		*29.81* **	*(14.53)*	*- 5.05*	*(8.57)*	*0*	*(omitted)*
Overall R2	**0.47**		**0.94**		**0.85**		**0.91**	

Note: ***,**,* implies significance at 99, 95 and 90% levels respectively. Standard Errors are reported in parenthesis.

Table 11: Empirical Results of the Random Effects GLS Regression of the Gravity Model of Bilateral non-Oil Trade Flow per Region (1999-2016) (Continued)

Region	***North America***		***Oceania***		***South America***		***West Asia***		***G20***	
GDP Per Capita	*1.13* ***	*(0.15)*	*0.22*	*(0..44)*	*3.38* ***	*(0.47)*	*1.04* ***	*(0.19)*	*0.86* ***	*(0.11)*
Population	*1.96* ***	*(0.11)*	*2.34* ***	*(0.39)*	*1.27* ***	*(0.18)*	*1.70* ***	*(0.11)*	*1.55* ***	*(0.05)*
Area	*- 22.62* ***	*(2.86)*	*- 15.20* ***	*(4.58)*	*- 7.20*	*(4.53)*	*- 10.43* **	*(4.20)*	*- 11.60* ***	*(1.69)*
Distance	*- 12.46* ***	*(2.08)*	*- 4.53* **	*(1.88)*	*- 14.96* ***	*(3.53)*	*- 2.55* ***	*(0.98)*	*- 0.06*	*(0.33)*
Language	*0*	*(omitted)*	*0*	*(omitted)*	*0*	*(omitted)*	*0*	*(omitted)*	*2.21* **	*(1.00)*
Border Sharing	*0*	*(omitted)*	*0*	*(omitted)*	*0*	*(omitted)*	*0*	*(omitted)*	*0*	*(omitted)*
Landlocked	*0*	*(omitted)*	*0*	*(omitted)*	*0.90*	*(0.60)*	*1.39* **	*(0.62)*	*0*	*(omitted)*
Island	*0*	*(omitted)*	*81.15* ***	*(27.19)*	*0*	*(omitted)*	*1.56*	*(1.28)*	*0.13*	*(0.34)*
Colonized	*161.80* ***	*(27.37)*	*0*	*(omitted)*	*93.50* **	*(43.82)*	*2.42* **	*(0.95)*	*16.72* ***	*(5.87)*
FTA	*0*	*(omitted)*	*0*	*(omitted)*	*0*	*(omitted)*	*0*	*(omitted)*	*0*	*(omitted)*
BIT	*0*	*(omitted)*	*0*	*(omitted)*	*0*	*(omitted)*	*- 0.16*	*(0.18)*	*- 0.02*	*(0.12)*
DTA	*0.002*	*(0.22)*	*0.11*	*(2.01)*	*0.09*	*(0.61)*	*- 0.25*	*(0.16)*	*- 0.05*	*(0.09)*
Foreign Missions	*0.09*	*(0.12)*	*0.81*	*(1.87)*	*- 0.12*	*(0.31)*	*- 0.17*	*(0.14)*	*0.60* ***	*(0.11)*
UAE Missions	*0.44*	*(0.34)*	*0*	*(omitted)*	*- 0.24*	*(0.38)*	*- 0.27*	*(0.18)*	*0.03*	*(0.08)*
Constant	*0*	*(omitted)*	*0*	*(omitted)*	*0*	*(omitted)*	*26.96*	*(17.57)*	*0*	*(omitted)*
Overall R2	**0.94**		**0.38**		**0.54**		**0.86**		**0.78**	

Note: ***,**,* implies significance at 99, 95 and 90% levels respectively. Standard Errors are reported in parenthesis.

Table 12: Empirical Results of the Random Effects GLS Regression of the Gravity Model of Foreign Direct Investments Flow per Region (1999-2016)

Region	***Overall***		***Africa***		***Arab Countries***		***Australasia***	
GDP Per Capita	0.26 ***	*(0.07)*	- 0.38	*(0.26)*	1.19 **	*(0.47)*	- 1.77	*(1.67)*
Population	0.23 **	*(0.10)*	0.45	*(0.30)*	- 1.22	*(0.87)*	3.85	*(3.11)*
Area	- 0.14 **	*(0.06)*	- 0.06	*(0.20)*	0.16	*(0.38)*	0.67	*(0.62)*
Distance	- 0.12	*(0.19)*	0.46	*(0.76)*	- 0.37	*(0.85)*	- 1.05	*(1.92)*
Language	1.34 ***	*(0.46)*	2.02	*(1.48)*	0	*(omitted)*	0	*(omitted)*
Border Sharing	0.74	*(0.78)*	0	*(omitted)*	0	*(omitted)*	0	*(omitted)*
Landlocked	- 0.29	*(0.29)*	- 0.95 *	*(0.52)*	0	*(omitted)*	0	*(omitted)*
Island	0.08	*(0.30)*	0.38	*(1.85)*	0	*(omitted)*	0	*(omitted)*
Colonized	0.50	*(0.76)*	0	*(omitted)*	0	*(omitted)*	0	*(omitted)*
FTA	- 0.18	*(0.35)*	0	*(omitted)*	0.08	*(1.28)*	0	*(omitted)*
BIT	- .016	*(0.20)*	- 1.40	*(1.79)*	- 0.73	*(0.76)*	0	*(omitted)*
DTA	- 0.25	*(0.17)*	- 0.56	*(0.72)*	0.67	*(0.96)*	1.86	*(1.56)*
Foreign Missions	- 0.04	*(0.16)*	- 0.04	*(0.37)*	2.58	*(1.75)*	0.21	*(1.00)*
UAE Missions	0.14	*(0.17)*	0.38	*(0.45)*	- 6.71	*(13.17)*	- 0.48	*(0.84)*
Constant	4.38 **	*(1.91)*	2.67	*(8.35)*	0	*(omitted)*	0	*(omitted)*
Overall R2	**0.24**		**0.14**		**0.14**		**0.71**	

Note: ***,**,* implies significance at 99, 95 and 90% levels respectively. Standard Errors are reported in parenthesis.

Table 12: Empirical Results of the Random Effects GLS Regression of the Gravity Model of Foreign Direct Investments Flow per Region (1999-2016) (Continued)

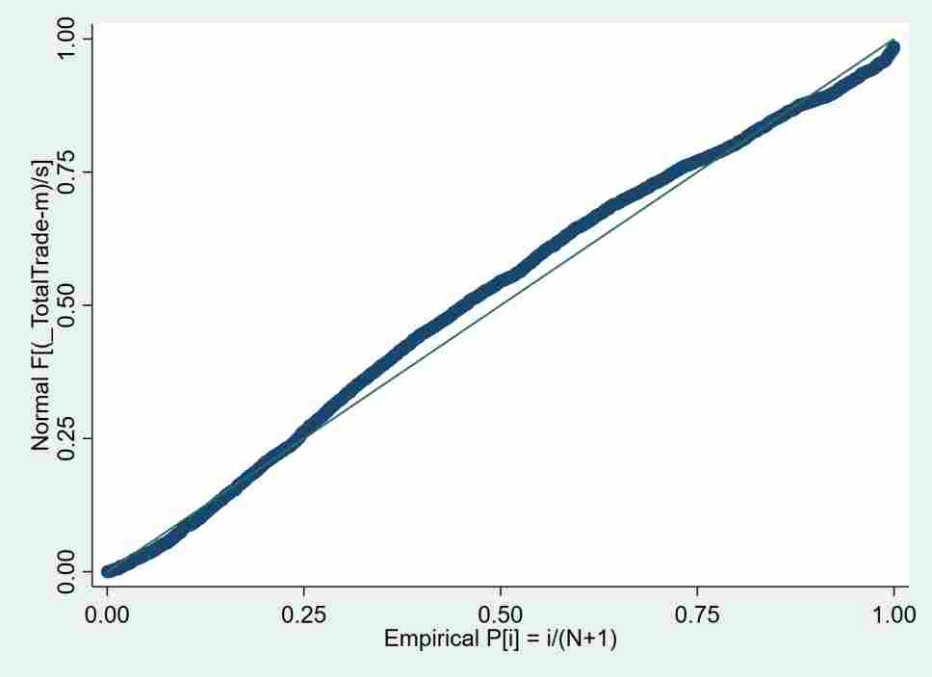
Region	***Carribean***	***East Asia***		***Europe***		***GCC***	
GDP Per Capita		*0.43*	** *(0.18)*	*0.14*	*(0.21)*	*1.72*	*** *(0.51)*
Population		*- 0.61*	* *(0.36)*	*0.26*	*(0.31)*	*- 1.29*	* *(0.77)*
Area		*0.31*	*(0.20)*	*- 0.23*	*(0.17)*	*- 0.62*	*(0.47)*
Distance		*1.11*	*(1.31)*	*1.24*	*(1.13)*	*1.55*	* *(0.80)*
Language		*0*	*(omitted)*	*0*	*(omitted)*	*0*	*(omitted)*
Border Sharing		*0*	*(omitted)*	*0*	*(omitted)*	*4.00*	* *(2.21)*
Landlocked		*1.09*	*(2.29)*	*- 0.03*	*(0.56)*	*0*	*(omitted)*
Island	*Not reported due to insufficient observations*	*- 0.45*	*(0.58)*	*0.57*	*(0.63)*	*- 2.88*	*(3.39)*
Colonized		*- 13.29*	*(12.11)*	*0.43*	*(1.17)*	*0*	*(omitted)*
FTA		*1.84*	** *(0.83)*	*- 0.07*	*(0.43)*	*0*	*(omitted)*
BIT		*- 1.08*	** *(0.52)*	*0.17*	*(0.33)*	*0*	*(omitted)*
DTA		*0.40*	*(0.54)*	*- 0.15*	*(0.23)*	*0*	*(omitted)*
Foreign Missions		*- 0.39*	*(0.46)*	*0.47*	*(0.31)*	*- 2.48*	*(4.34)*
UAE Missions		*0.45*	*(0.38)*	*0.17*	*(0.27)*	*0*	*(omitted)*
Constant		*0*	*(omitted)*	*- 5.04*	*(8.50)*	*0*	*(omitted)*
Overall R2		**0.19**		**0.40**		**0.48**	

Note: ***,**,* implies significance at 99, 95 and 90% levels respectively. Standard Errors are reported in parenthesis.

Table 12: Empirical Results of the Random Effects GLS Regression of the Gravity Model of Foreign Direct Investments Flow per Region (1999-2016) (Continued)

Region	***North America***		***Oceania***	***South America***			***West Asia***		
GDP Per Capita	*1.45*	*(1.12)*		*- 0.63*		*(0.95)*	*0.29*		*(0.30)*
Population	*- 1.36*	*(1.87)*		*1.61*		*(1.14)*	*0.72*		*(0.47)*
Area	*0.37*	*(0.74)*		*- 1.02*		*(0.68)*	*0.03*		*(0.35)*
Distance	*4.97*	*(14.84)*		*- 3.56*		*(4.67)*	*0.59*		*(1.22)*
Language	*0*	*(omitted)*		*0*		*(omitted)*	*0*		*(omitted)*
Border Sharing	*0*	*(omitted)*		*0*		*(omitted)*	*0*		*(omitted)*
Landlocked	*0*	*(omitted)*		*- 3.08*	**	*(1.54)*	*0.55*		*(1.05)*
Island	*0*	*(omitted)*	*Not reported due to insufficient observations*	*0*		*(omitted)*	*0.80*		*(1.68)*
Colonized	*- 62.47*	*(159.21)*		*63.97*		*(55.56)*	*2.43*		*(1.74)*
FTA	*0*	*(omitted)*		*0*		*(omitted)*	*0*		*(omitted)*
BIT	*0*	*(omitted)*		*0*		*(omitted)*	*- 0.22*		*(0.49)*
DTA	*- 1.32*	*(0.82)*		*0*		*(omitted)*	*- 1.20*	**	*(0.51)*
Foreign Missions	*0.32*	*(0.64)*		*- 1.61*	**	*(0.82)*	*- 1.86*	**	*(0.90)*
UAE Missions	*0.37*	*(0.74)*		*- 0.06*		*(0.69)*	*0.30*		*(0.92)*
Constant	*0*	*(omitted)*		*0*		*(omitted)*	*- 6.97*		*(13.63)*
Overall R2	**0.68**			**0.45**			**0.35**		

Note: ***,**,* implies significance at 99, 95 and 90% levels respectively. Standard Errors are reported in parenthesis.



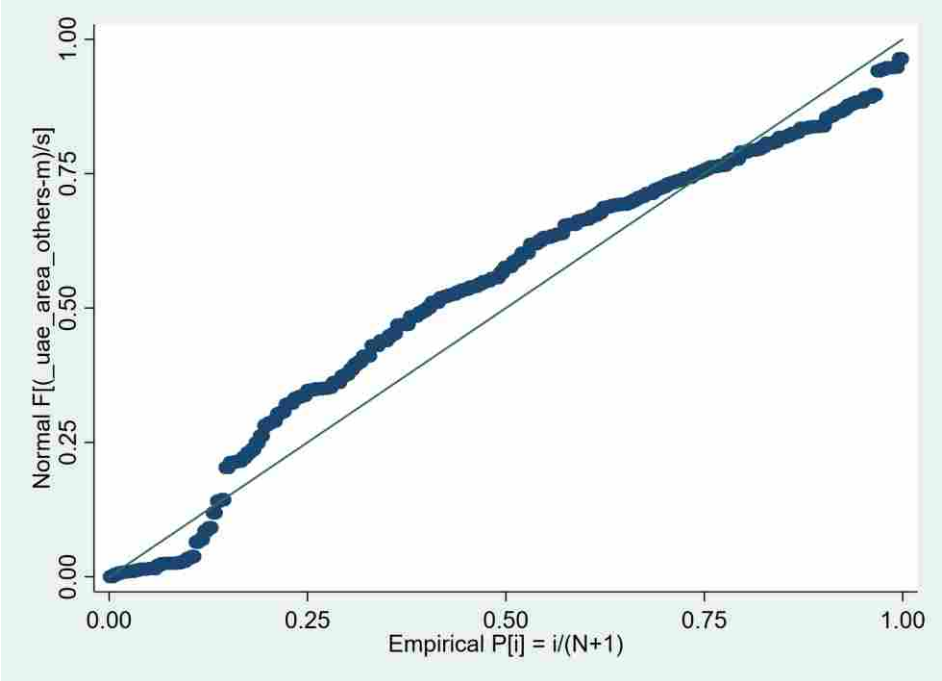
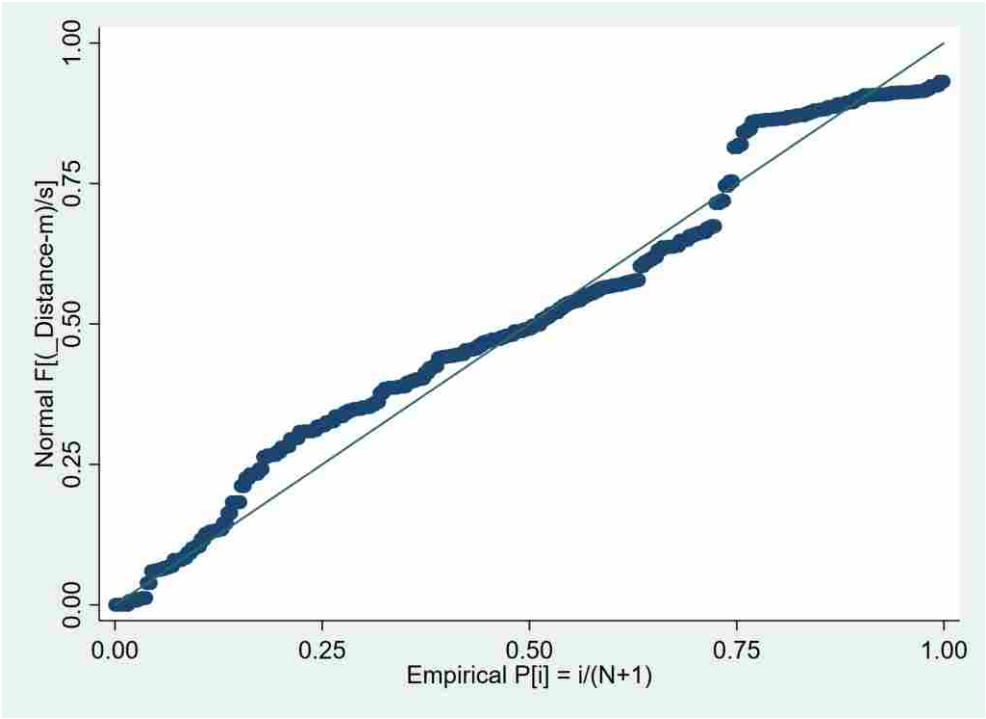


Figure 1: P-P Plot of the Variables



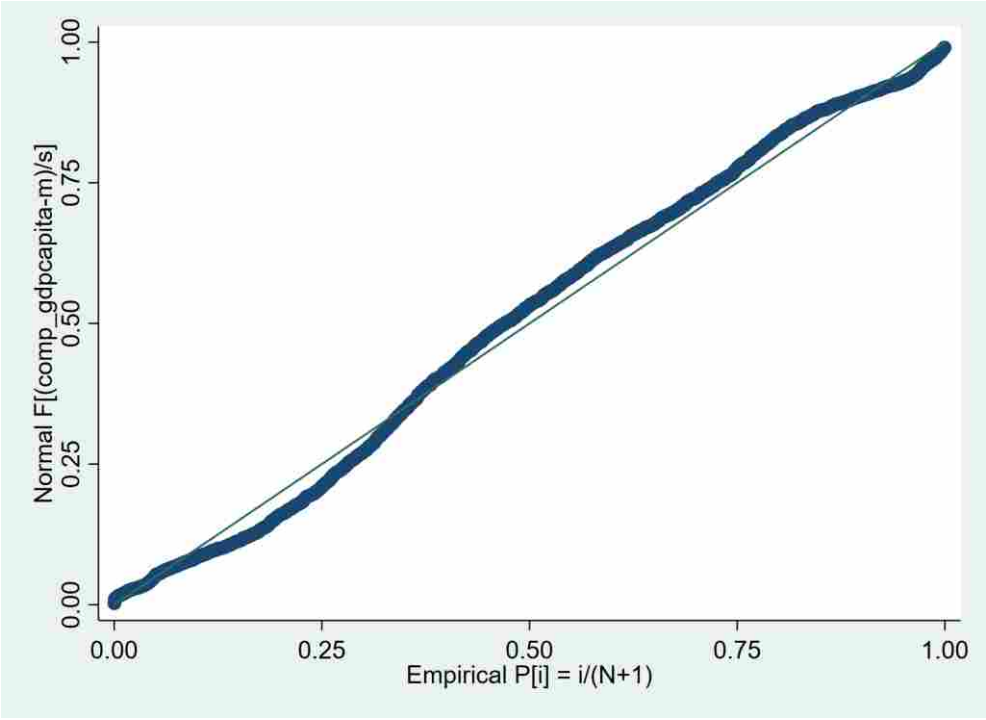
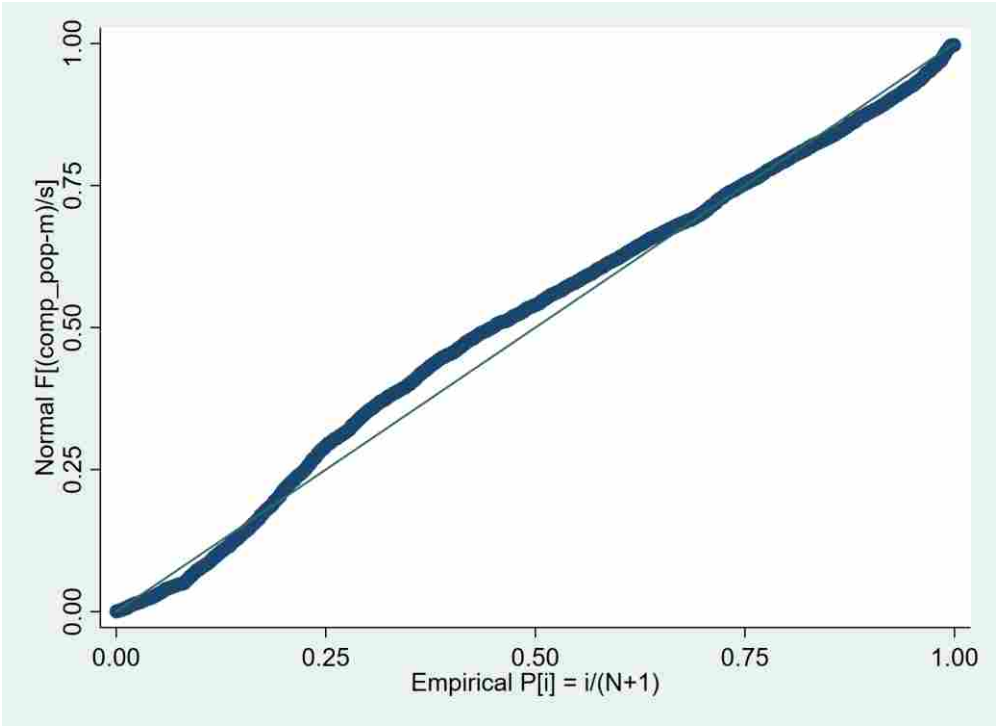


Figure 1: P-P Plot of the Variables (Continued)



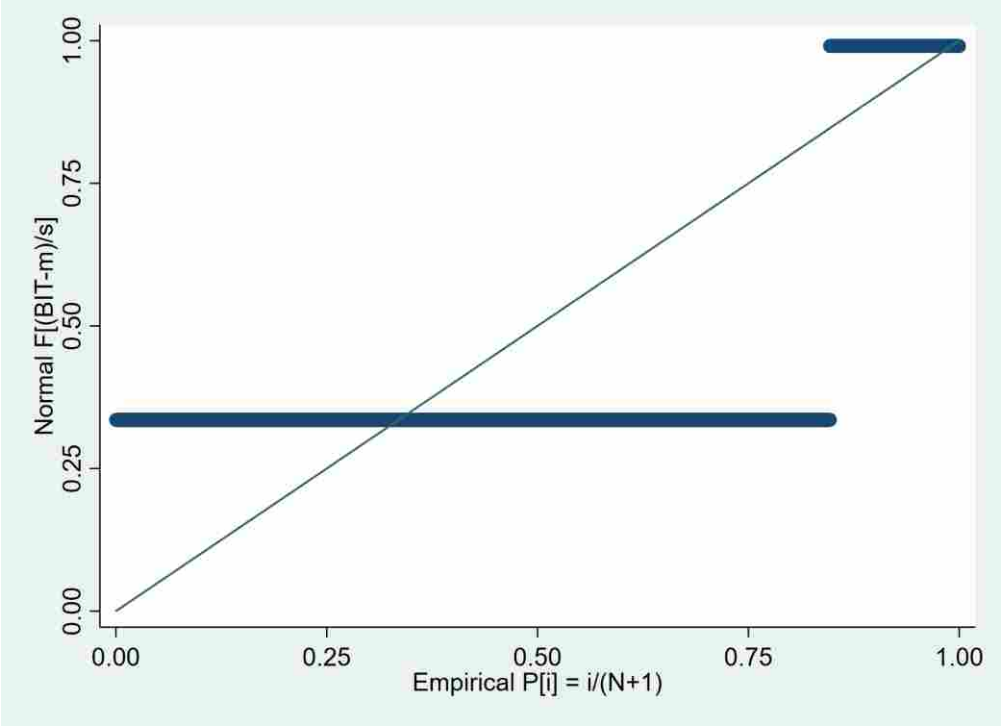
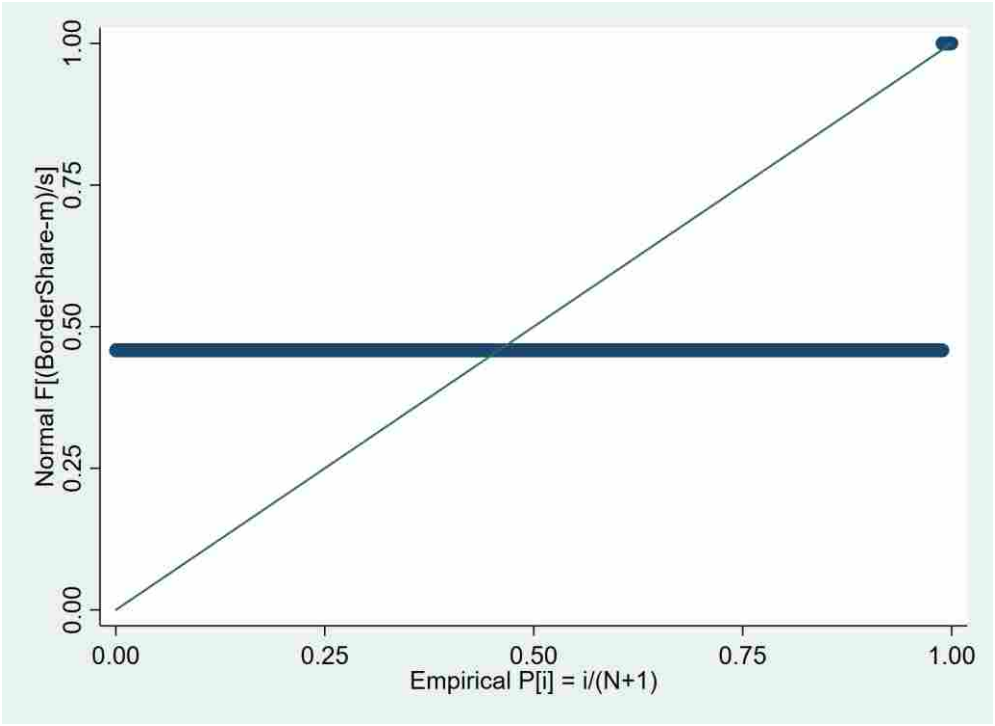


Figure 1: P-P Plot of the Variables (Continued)



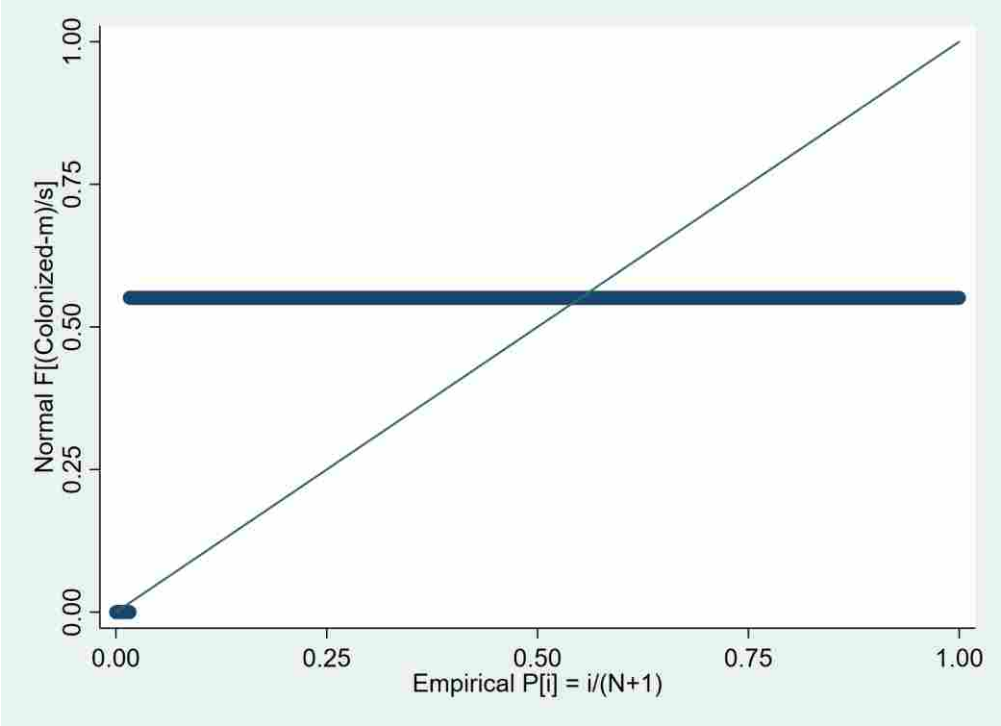
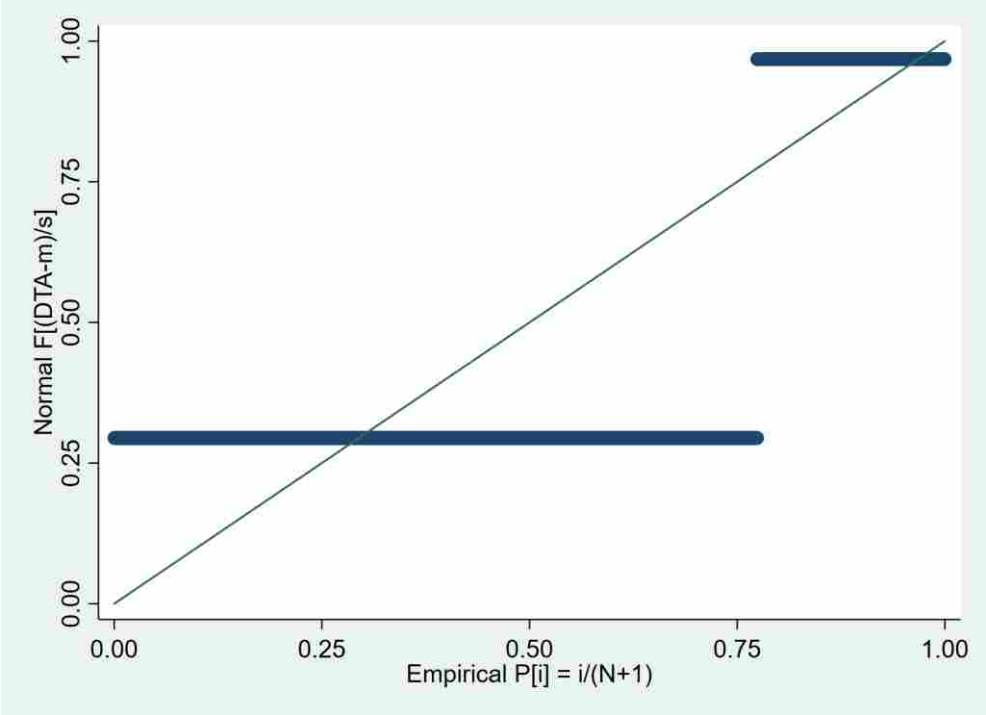


Figure 1: P-P Plot of the Variables (Continued)



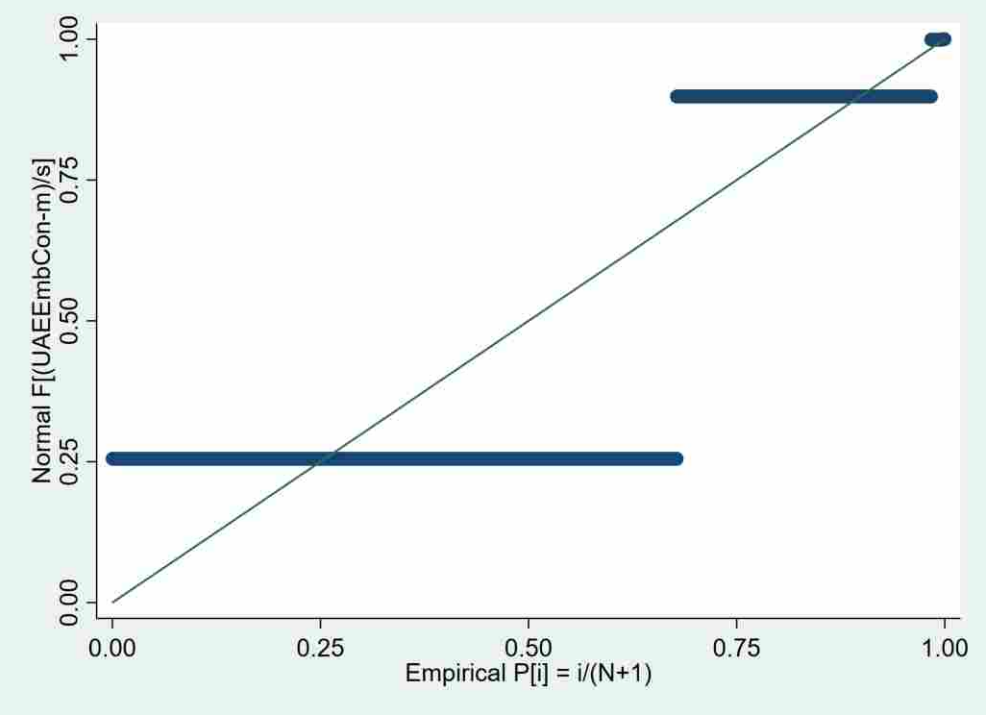
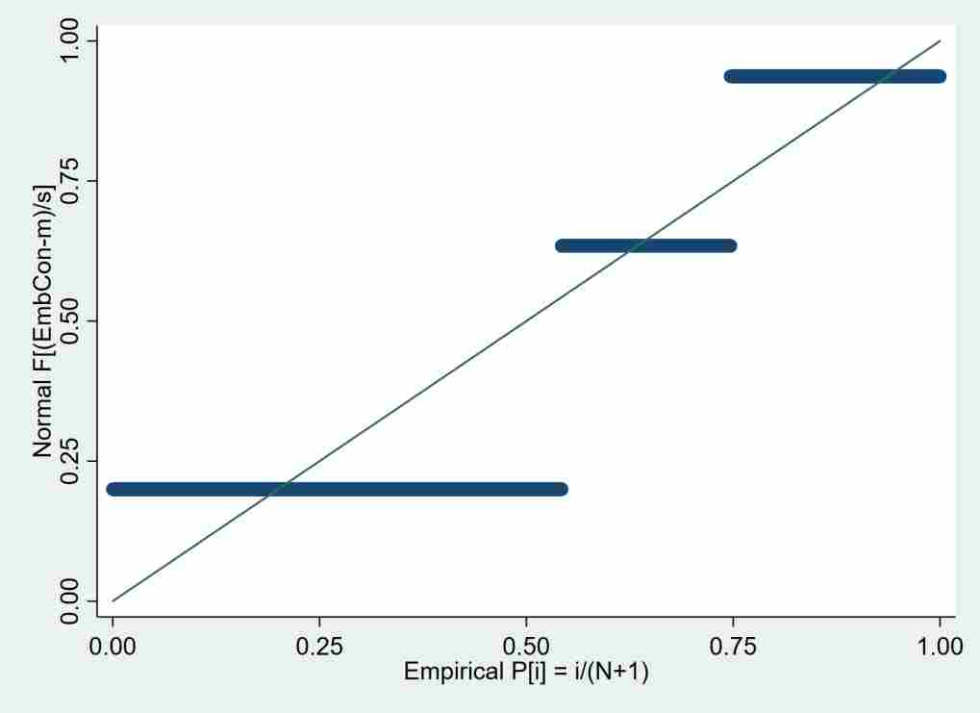


Figure 1: P-P Plot of the Variables (Continued)



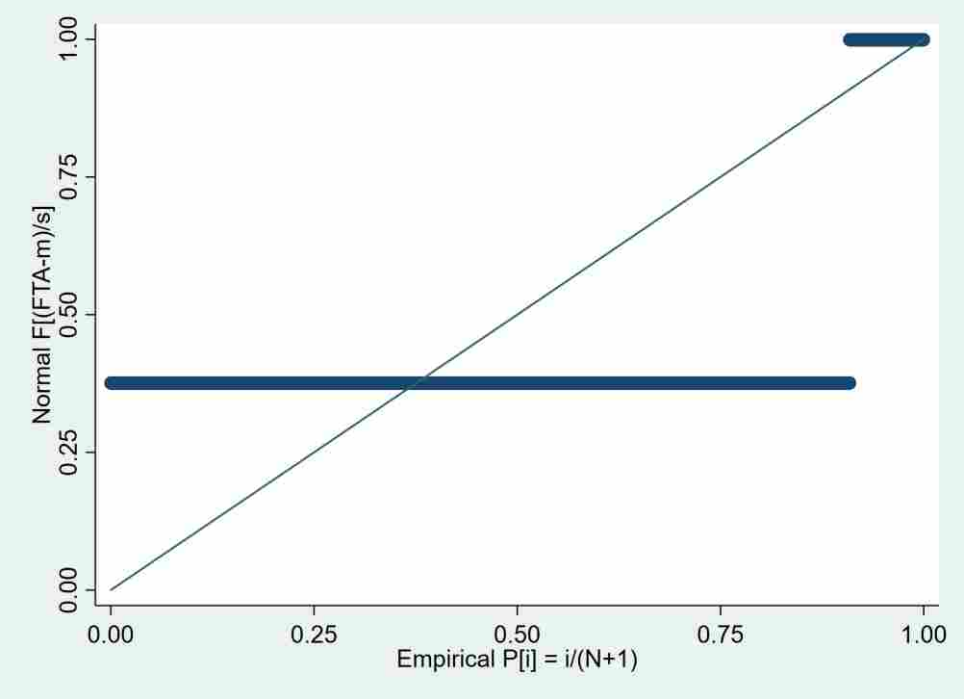
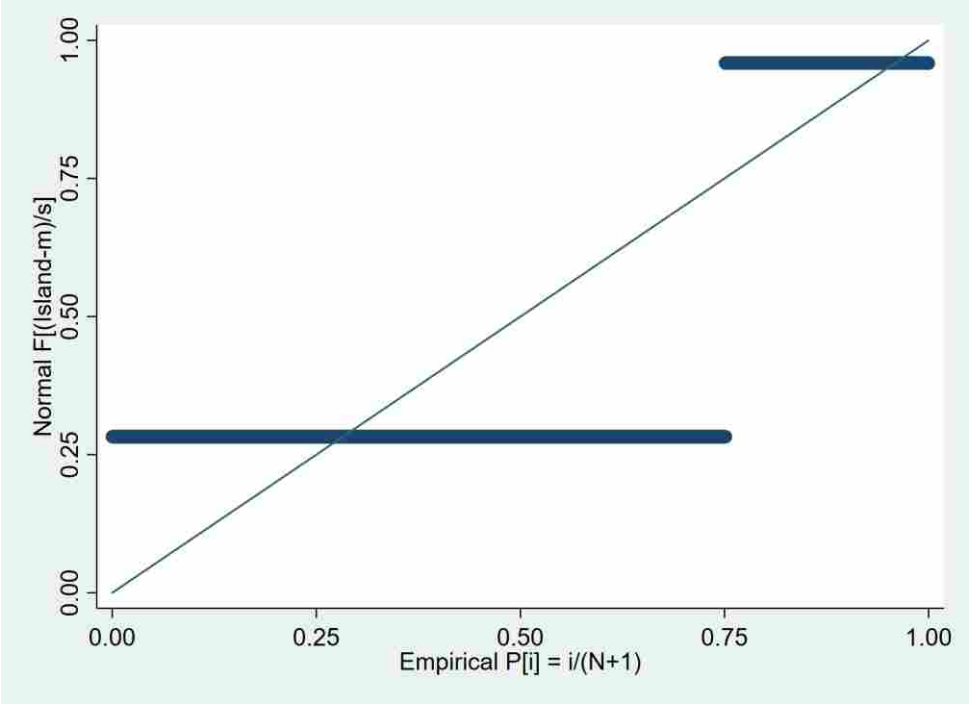


Figure 1: P-P Plot of the Variables (Continued)



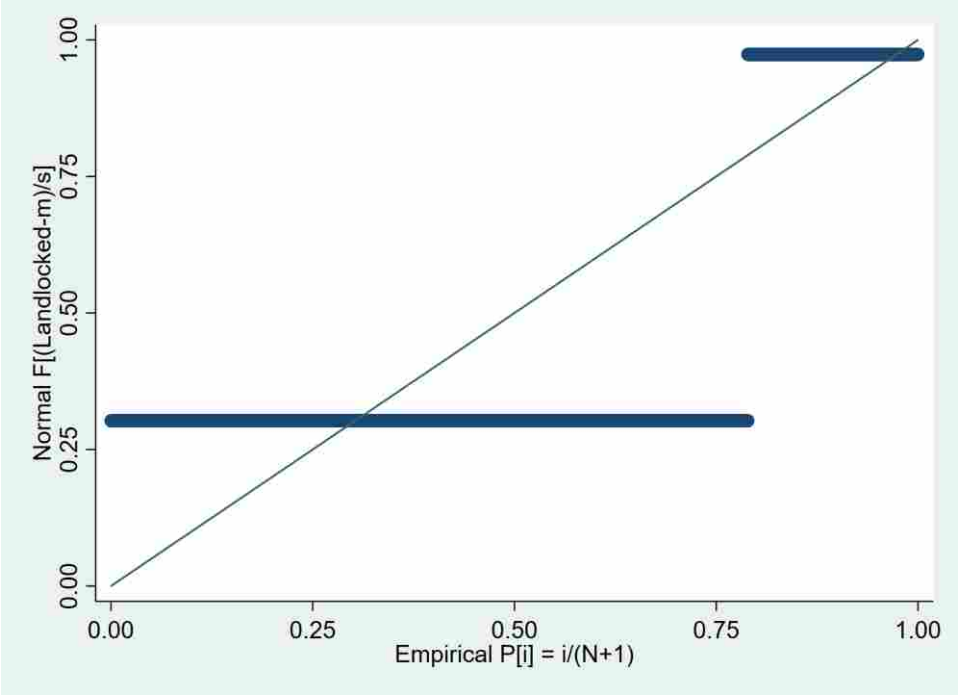


Figure 1: P-P Plot of the Variables (Continued)

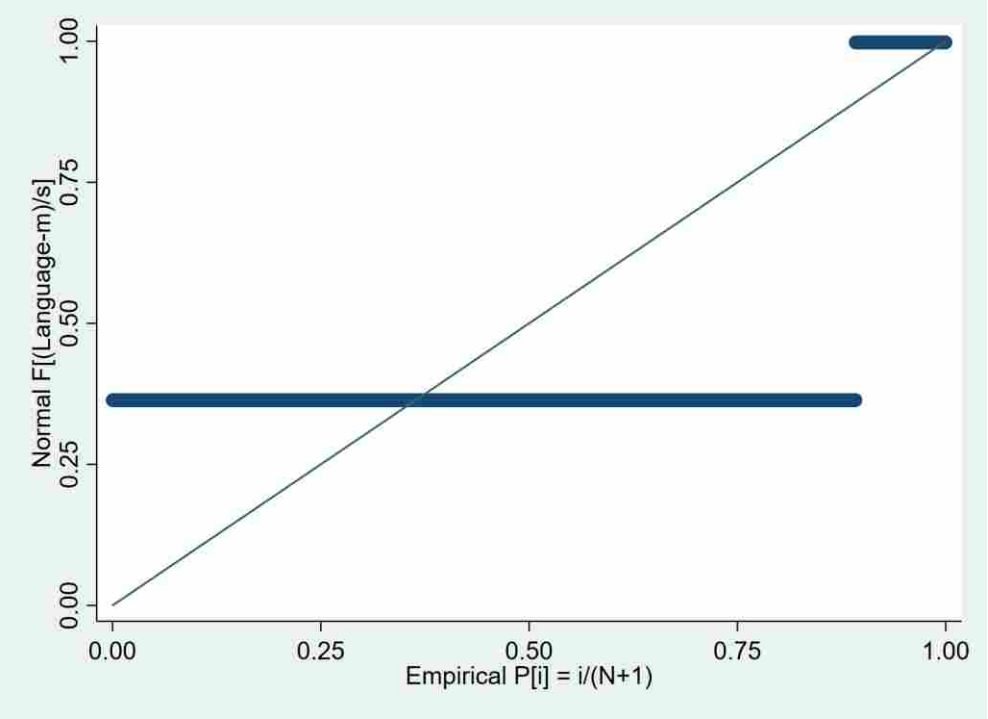
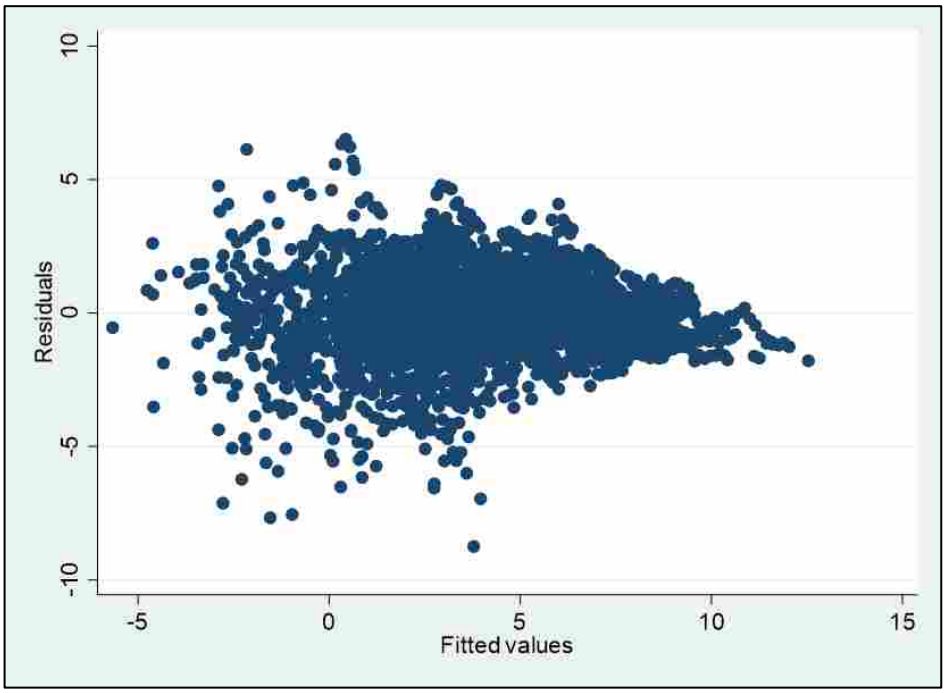


Figure 1: P-P Plot of the Variables (Continued)

Trade



Investment

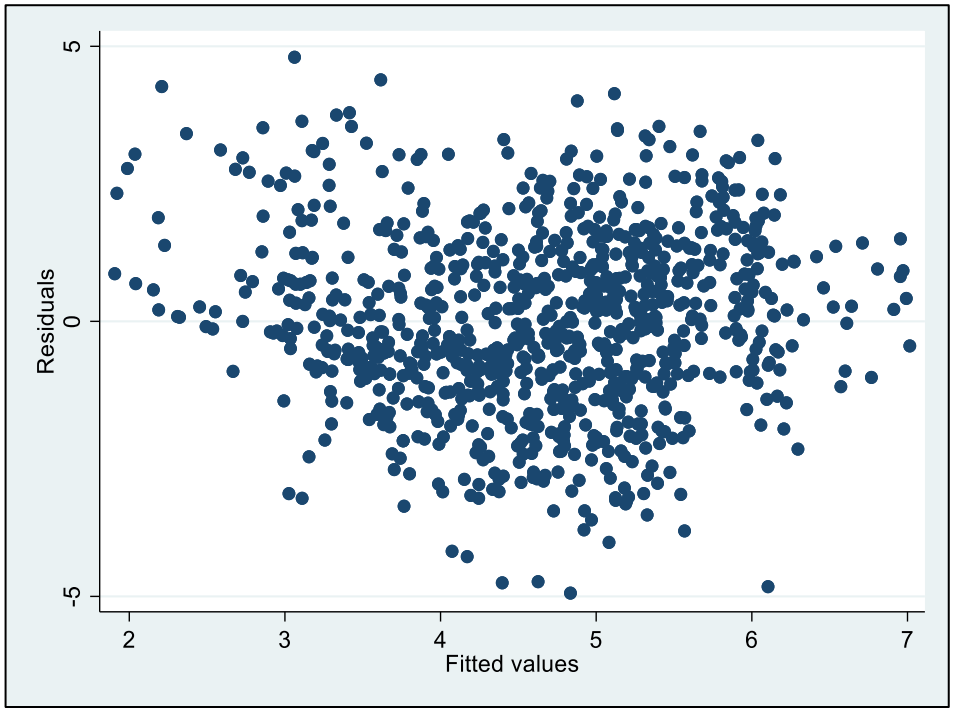
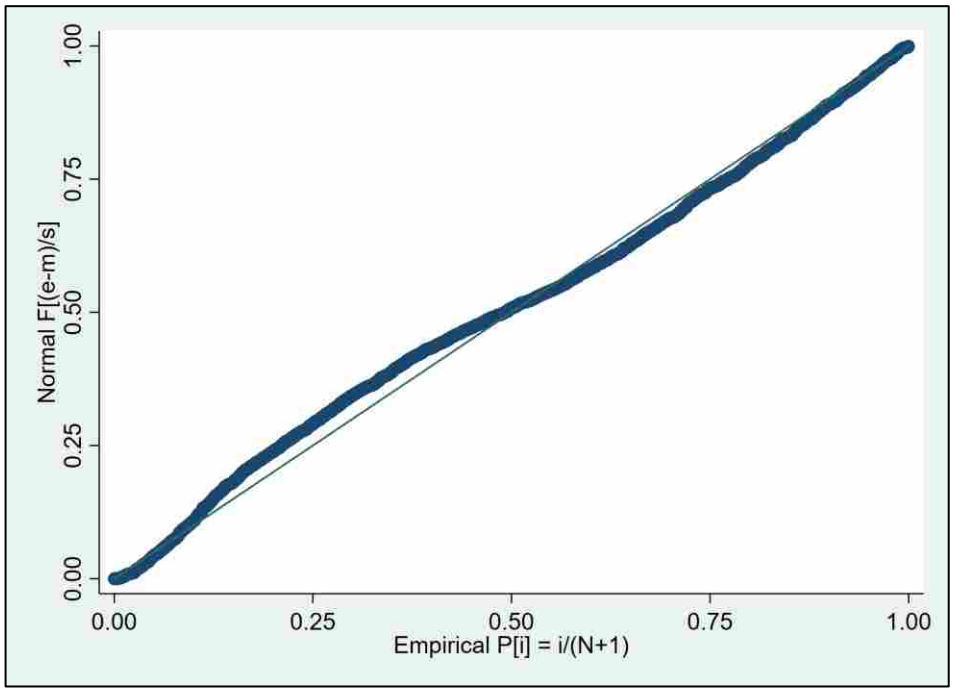


Figure 2: Plot of the Fitted Values against the Residuals

Trade



Investment

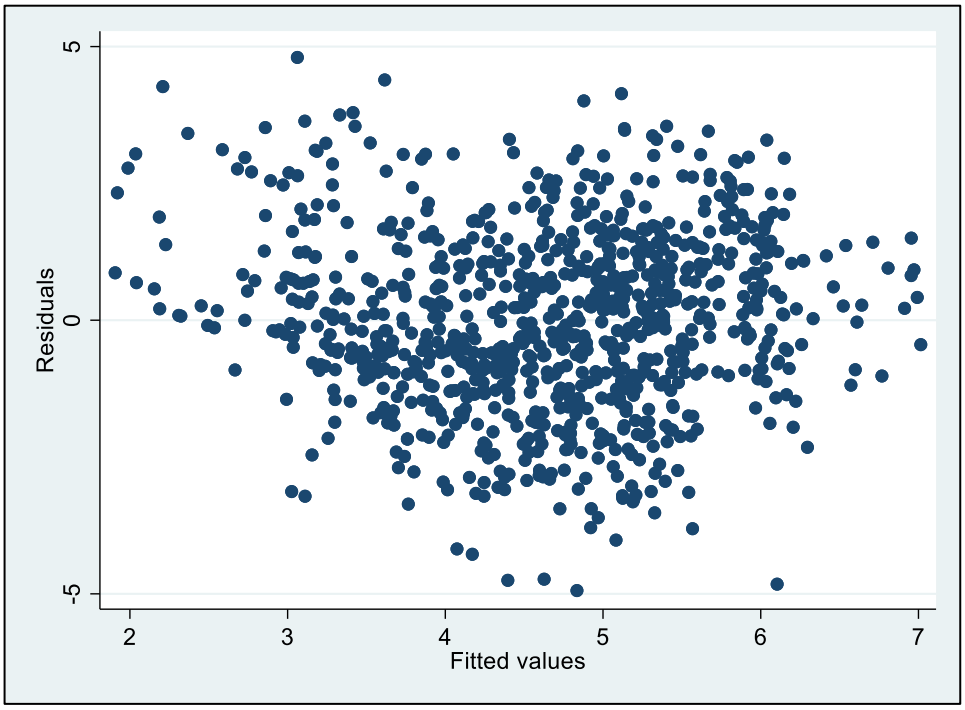


Figure 3: P-P Plot of the Error term

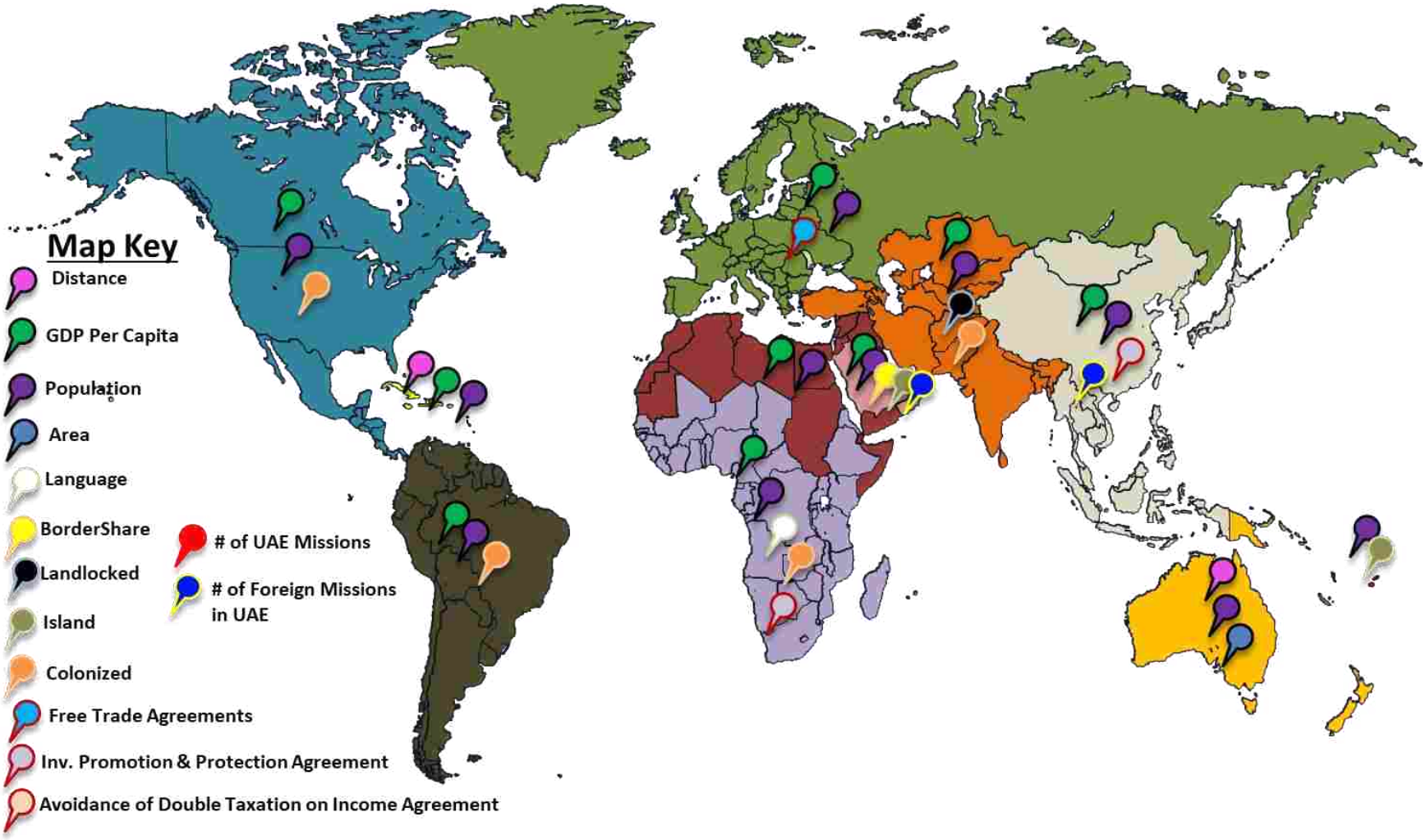


Figure 4: Economic Diplomacy Tools and Demographics that Boost the Bilateral Flow of Non-Oil Trade per Geographic Region

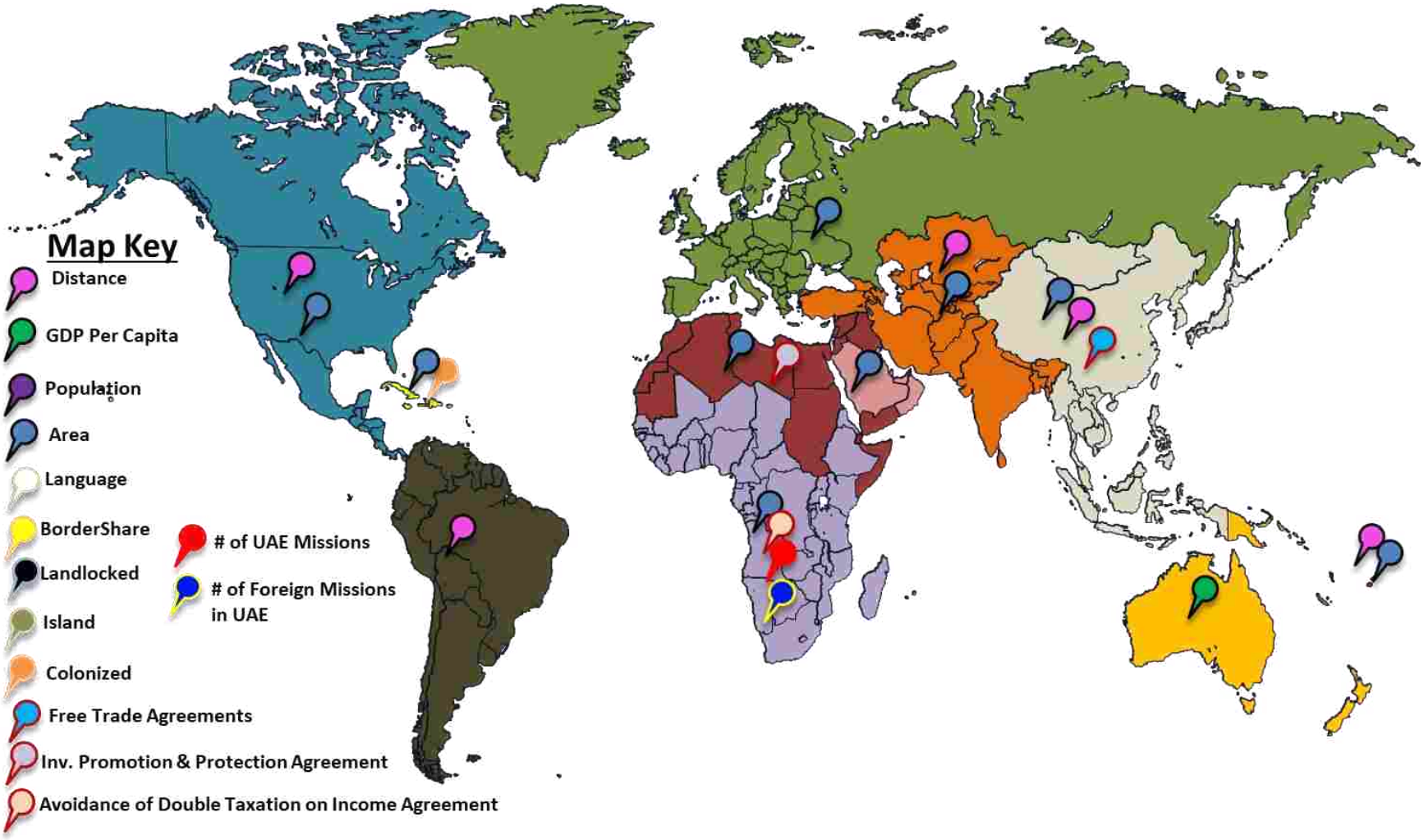


Figure 5: Economic Diplomacy Tools and Determinants that Reduce the Bilateral Flow of Non-Oil Trade

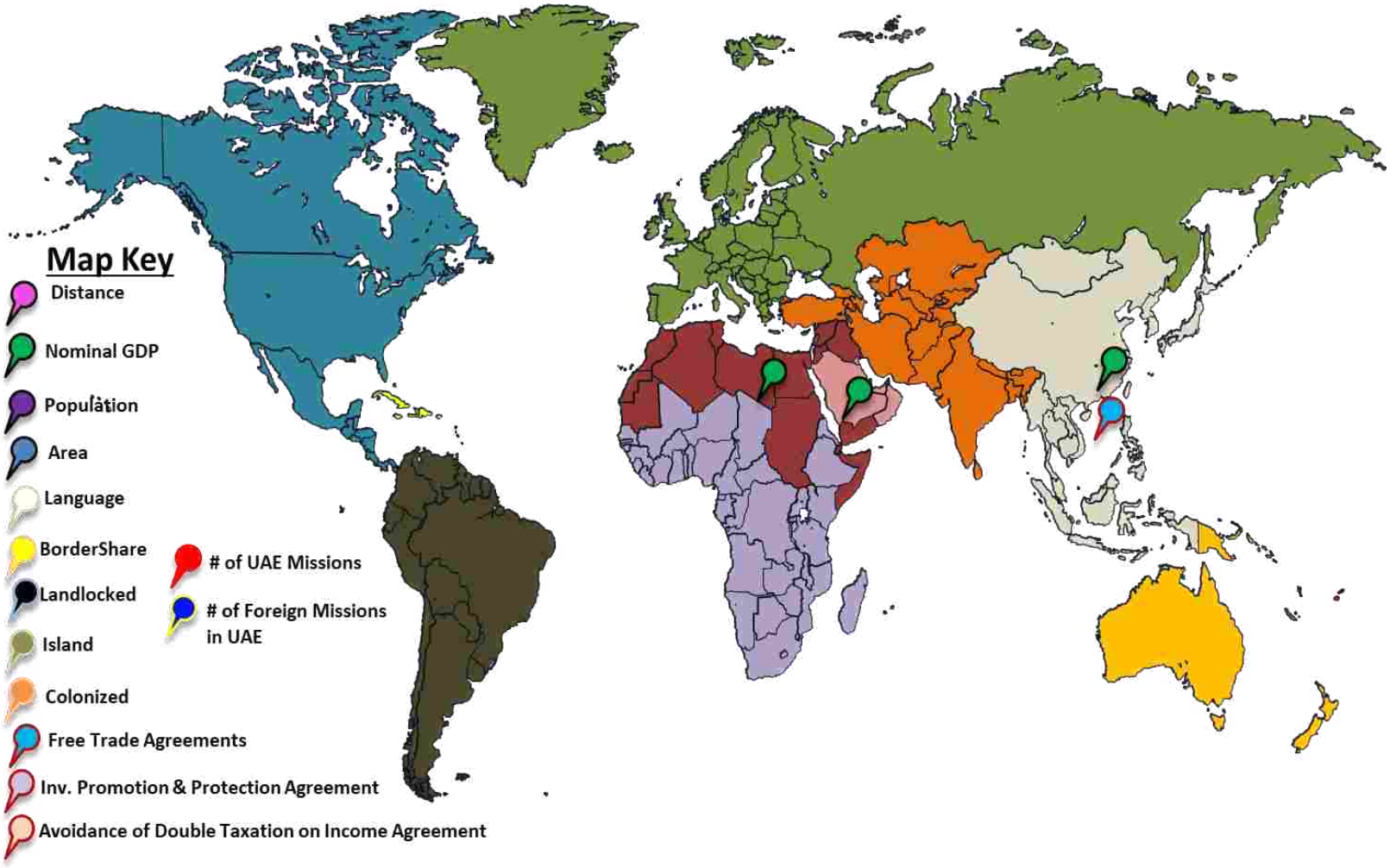


Figure 6: Economic Diplomacy Tools and Determinants that Boost the Bilateral Flow of Foreign Direct Investments

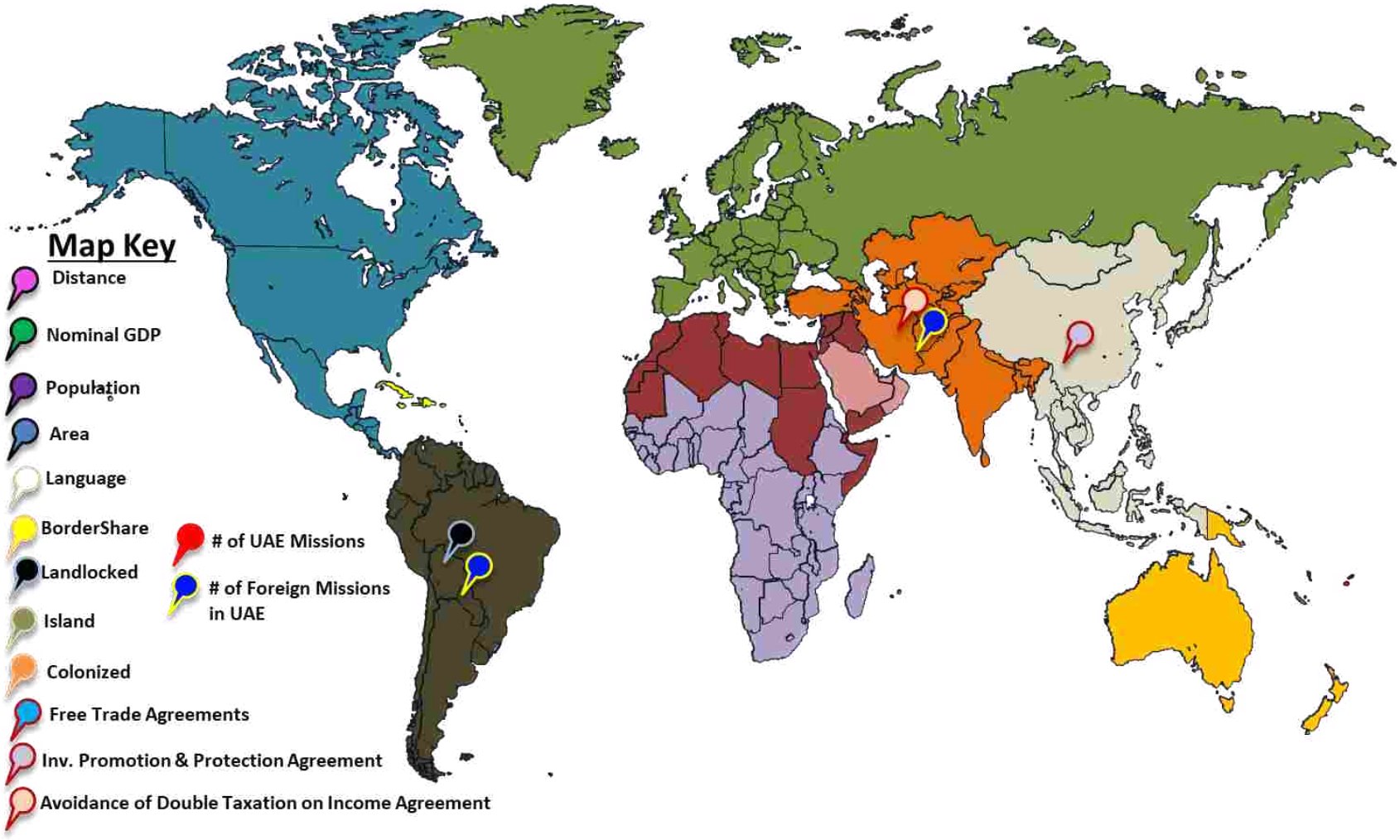


Figure 7: Economic Diplomacy Tools and Determinants that Reduce the Bilateral Flow of Foreign Direct Investments