

**IHS**  
Making cities work

*Erasmus*

IHS is the international institute of urban management  
of Erasmus University Rotterdam

**MSc Programme in Urban Management and Development**

Rotterdam, the Netherlands

September 2013

**Thesis**

Urban Competitiveness between Regions of the Global South:  
Reshaping the Global Urban Economic Network

**Name:** Lucía Gómez

**Supervisor:** Dr. Ronald Wall

**Specialization:** Urban Competitiveness and Resilience (UCR)

UMD 9

## **MASTER'S PROGRAMME IN URBAN MANAGEMENT AND DEVELOPMENT**

**(October 2012 – September 2013)**

# **Urban Competitiveness between Regions of the Global South<sup>1</sup>: Reshaping the Global Urban Economic Network**

Lucía Gómez  
Finland - Colombia

Supervisor: Dr. Ronald Wall

UMD 9 Report number:  
Rotterdam, September 2013

---

<sup>1</sup> The global South is used here to signify what are commonly known as 'developing', 'Third World', or 'peripheral' regions of Central and South America, South and Southeast Asia, the Middle East, and Africa (Murphy, 2008).

## Summary

This study aims to provide an overview of the situation of the global urban economic network in the global South as a result of the current financial crisis. The crisis is hitting the global urban economic network at its core, while the periphery of the network is enjoying an economic boom, which is causing changes in the global economy. Key concepts to help in understanding these changes are: city networks, urban competitiveness and multinationals.

The study provides an introductory overview of the theories that have contributed to the concept of the global urban economic network, describing the way it is “structured”, its main features, and the way that internal economic flows are affected by the ongoing global financial crisis. The emphasis of the study is on the southernmost component of this network, The global South, which has largely been dependent on exporting goods and services to the northern hemisphere, but is set to “revolutionize the global economy”. The generation of a South-South network that will be at the core of this revolution is thoroughly discussed.

The main research question was: What is the state of the global urban economic network in the global South? Two specific research questions derived from this one: (i) What have the trends and patterns of FDI in the global south been during the last decade? and (ii) Which location factors have been crucial for attracting this FDI? In order to answer these questions, the study combines descriptive and explanatory approaches to provide an understanding of the contemporary structure of the global South within the world system, and the causes of the transformation of the global urban economic network. In the first part of the study a dataset based on Foreign Direct Investment (FDI) is analysed to find flow trends and patterns, especially in the global South that could reveal the development of a network within the so-called “periphery”, which corresponds to a large extent with the global South. The second part uses location factors to test the results from the first part in order to understand: the processes behind the changes going on in the world economy, the factors impacting the decisions of multinational enterprises to invest in a given place and the consequences of such investments on specific countries and regions.

The analyses shows that during the 10-year period covered by the study the investments originating in the South were double the investments originating in the North, and continue to grow even after the 2008 crisis, although they still represent a very small amount (8%) of total volume of investments worldwide. The outcome of this is that the global South`s share in the global economic urban network is beginning to grow in strength and relevance, and as result the South-South and South-North links of the network are rapidly being strengthened.

When observing the structure and geographical distribution of FDI flows, the research reveals that the network has a strong hierarchical structure with its central elements located in India and the UAE. In addition, two established heterarchical patterns were identified: first, a region constituted by the Asia Pacific, and part of the Middle East; and second, Latin America. Still at the periphery of the global economic urban network are vast parts of Africa, which have only a few asymmetrical economic relations with a limited number of core countries.

This study also demonstrates that location factors such as domestic market size, innovation, technological readiness, and the macroeconomic environment are key to attracting investment flows to the global South as well as being central to investments from the South in the North. This set of location factors indicates that what is required from the region nowadays is more sophisticated than the mere provision of raw materials or cheap labour. The study also indicates that a country`s national state of affairs (local policies, economic and social conditions, politics, etc.) matters for FDI attraction and for becoming part of the global urban economic network.

This study can be considered a guideline for understanding the development of the global South as a whole, and as a part of the global system. This study also contributes to closing at least one of the gaps in world city research. Further research could lead to a deeper understanding of the structure of the global urban economic network in the global South, and to more accurate and resource conscious urban planning, management and policy making processes.

## **Keywords**

Globalization, World City Networks, Competitiveness, Economic Crisis, Multinationals, FDI

## Acknowledgements

The author wants to acknowledge....

The help of my supervisor who was key to the development and success of this research.

The support of my friends and colleagues in Helsinki, who were my backstopping and helped me manage my job back home.

The invaluable and wonderful participation of the people at IHS for helping me that much and making my life nicer and easier.

The hard work of my English correctors, who made me suffer a lot but in the end gave me a great output.

And also I want to say a big “thank you” to my friends, old and new, to my family and especially to my brother who never stops to believe in me.

## Abbreviations

A&P	Asia Pacific
ECLAC	Economic Commission for Latin America and the Caribbean
EME	Emerging Market Economies
FDI	Foreign Direct Investment
GPN	Global Production Network
IHS	Institute for Housing and Urban Development Studies
LA	Latin America
ME	Middle East
MNC	Multinational Corporations
MNE	Multinational Enterprises
UAE	United Arab Emirates
SA	South Africa
WR	World Region

# Table of Contents

<b>Summary</b> .....	<b>iii</b>
<b>Keywords</b> .....	<b>iv</b>
<b>Acknowledgements</b> .....	<b>v</b>
<b>Abbreviations</b> .....	<b>vi</b>
<b>List of Figures</b> .....	<b>viii</b>
<b>List of Tables</b> .....	<b>ix</b>
<b>List of Charts</b> .....	<b>ix</b>
<b>Chapter 1: Introduction</b> .....	<b>1</b>
1.1 Background.....	1
1.2 Problem Statement .....	5
1.3 Research Objectives .....	5
1.3.1 The Descriptive Approach .....	5
1.3.2 The Explanatory Approach .....	6
1.4 Research Questions .....	6
1.5 Significance of the Study .....	7
1.6 Scope and Limitations.....	7
<b>Chapter 2: Literature review</b> .....	<b>9</b>
2.1 The Global Urban Economic Network Concept.....	9
2.2 Globalization.....	10
2.3 Geographical Network Trajectory .....	12
2.4 Competitiveness .....	13
2.4.1 Regional Competitiveness.....	13
2.4.2 Firm Competitiveness and The Theory of the Firm .....	13
2.5 The Economic Crisis and Global Possibilities.....	14
2.6 Conceptual Framework .....	16
<b>Chapter 3: Research Design and Methods</b> .....	<b>17</b>
3.1 Research objectives.....	18
3.2 Revised Research Questions .....	18
3.3 Operationalization: Variables and Indicators .....	18
3.3.1 Dependent Variable $Y = FDI$ .....	18
3.3.2 Independent Variables $X =$ Location factors .....	19
3.4 Data Collection Methods.....	26
3.5 Sample Size and Selection .....	26
3.6 Validity and Reliability .....	27
3.7 Data Analysis Methods .....	28
3.7.1 Descriptive Analyses: .....	28
3.7.2 Explanatory Analysis:.....	29
<b>Chapter 4: Research Findings</b> .....	<b>30</b>
4.1 Investment Trends .....	30
4.1.1 North and South.....	30
4.1.2 World Regions.....	31
4.1.2.1 Investments destination: North.....	31
4.1.2.2 Investments destination: South.....	33
4.2 Industrial Sectors and Economic Activities.....	35
4.2.1 Analysis by Destination .....	35

4.2.2 Analysis by Origin.....	39
4.3 The Networks.....	42
4.3.1 South-South.....	42
4.3.1.1 Structure and Geographical Distribution.....	42
4.3.1.2 Main Industrial Sectors.....	45
4.3.2 South-North Network.....	48
4.3.2.1 Structure and Geographical Distribution.....	48
4.3.2.2 Main Industrial Sectors and Economic Activities with Origin of Investments the global South.....	50
4.4 Top Countries & Their Competitors.....	53
4.4.1 The Asia Pacific.....	55
4.4.1.1 India.....	55
4.4.1.2 China.....	56
4.4.1.3 Malaysia.....	58
4.4.2 The Middle East.....	59
4.4.2.1 The UAE.....	59
4.4.2.2 Saudi Arabia.....	61
4.4.2.3 Kuwait.....	62
4.4.3 LatinAmerica.....	64
4.4.3.1 Brazil.....	64
4.4.3.2 Mexico.....	65
4.4.3.3 Colombia.....	67
4.4.4 Africa.....	68
4.4.4.1 South Africa.....	68
4.4.4.2 Egypt.....	70
4.4.4.3 Nigeria.....	71
4.5 Location Factors.....	73
4.5.1 The Relation between Total FDI and Location Factors in the South.....	73
4.5.2. Relation between FDI originated in the South and Location Factors in the North.....	75

<b>Chapter 5: Conclusions and Recommendations.....</b>	<b>77</b>
<b>Bibliography.....</b>	<b>82</b>
<b>Annex 1: Top FDI Origins and Destinations.....</b>	<b>85</b>
<b>Annex 2: Network: Total FDI Destination South.....</b>	<b>89</b>
<b>Annex 3: Network: Total FDI Destination Asia Pacific.....</b>	<b>90</b>
<b>Annex 4: Network: Total FDI destination Middle East.....</b>	<b>91</b>
<b>Annex 5: Network: Total FDI Destination Latin America.....</b>	<b>92</b>
<b>Annex 6: Network: Total FDI Destination Africa.....</b>	<b>93</b>

## List of Figures

Figure 1: World Population Prospects.....	3
Figure 2: World GDP in PPP terms: 2020.....	4
Figure 3: Conceptual framework.....	17
Figure 4: The Global Competitiveness Index framework.....	24
Figure 5: The Brandt Line: The geography of the "North-South Divide".....	27
Figure 6: FDI Network: Origin South Destination South.....	44
Figure 7: FDI: Destinations in main industrial sectors.....	47
Figure 8: FDI network: Origin South Destination North.....	49
Figure 9: FDI origins for main economic activities.....	52



Figure 10: Top countries attracting FDI in the global South .....	54
Figure 11 India’s Competitors by Sectors.....	55
Figure 12 India’s Competitors by Activities .....	56
Figure 13 China’s Competitors by Sectors.....	57
Figure 14: China’s Competitors by Activities.....	57
Figure 15: Malaysia’s Competitors by Sectors.....	58
Figure 16: Malaysia’s Competitors by Activities .....	59
Figure 17: UAE’s Competitors by Sectors .....	60
Figure 18: UAE’s Competitors by Activities.....	60
Figure 19: Saudi Arabia’s Competitors by Sectors.....	61
Figure 20: Saudi Arabia’s Competitors by Activities.....	62
Figure 21: Kuwait’s Competitors by Sectors.....	63
Figure 22: Kuwait’s Competitors by Activities .....	63
Figure 23: Brazil’s Competitors by Sectors .....	64
Figure 24: Brazil’s Competitors by Activities.....	65
Figure 25: Mexico’s Competitors by Sectors .....	66
Figure 26: Mexico’s Competitors by Activities .....	66
Figure 27: Colombia’s Competitors by Sectors.....	67
Figure 28: Colombia’s Competitors by Activities .....	68
Figure 29: South Africa’s Competitors by Sectors .....	69
Figure 30: South Africa’s Competitors by Activities.....	69
Figure 31: Egypt’s Competitors by Sectors .....	70
Figure 32: Egypt’s Competitors by Activities.....	71
Figure 33: Nigeria’s Competitors by Sectors.....	72
Figure 34: Nigeria’s Competitors by Activities .....	72
Figure 35: Top FDI investors in the global South from the world by number of investments .....	85
Figure 36: Top FDI destinations in the global South from the world by number of investments .....	85
Figure 37: Top FDI destinations in the global South from the world by number of investments and growth.....	86
Figure 38: Top FDI Investors in the South from the South.....	87
Figure 39: Top FDI Destinations in the South from the South .....	87
Figure 40: Top FDI Investors in the North from the South.....	88
Figure 41: Top FDI Destinations in the North from the South .....	88

## List of Tables

Table 1: Operationalization .....	25
-----------------------------------	----

## List of Charts

Chart 1: Percentage of total FDI with the North & South as origins and destinations .....	31
Chart 2: FDI growth: North & South Origin and Destination.....	31
Chart 3: Percentage of total FDI: Origin all world regions Destination North .....	32

<b>Chart 4: Percentage of total FDI: Origin South Destination North .....</b>	<b>32</b>
<b>Chart 5: FDI growth: Destination North .....</b>	<b>33</b>
<b>Chart 6: Percentage of total FDI: Origin all world regions, Destination South.....</b>	<b>34</b>
<b>Chart 7: Percentage of total FDI: Origin North, Destination South .....</b>	<b>34</b>
<b>Chart 8: Percentage of total FDI: Origin South, Destination South.....</b>	<b>34</b>
<b>Chart 9: FDI Growth: Destination South.....</b>	<b>35</b>
<b>Chart 10: FDI growth: for top &amp; declining industrial sectors .....</b>	<b>37</b>
<b>Chart 11: FDI growth: for top &amp; declining economic activities.....</b>	<b>38</b>
<b>Chart 12: FDI growth: for top and declining industrial sectors &amp; economic activities .....</b>	<b>41</b>

# Chapter 1: Introduction

This thesis aims to provide an overview of the situation of the global urban economic network in the global South as a result of the current financial crisis and changes in the global economy. Key concepts to help in understanding the subject are: city networks, urban competitiveness and multinationals.

## 1.1 Background

The global urban economic network represents the connectivity among cities in terms of transactions between multinationals. Cities compete with each other on a global scale to attract investments<sup>2</sup> and to achieve better connectivity and a better position in the global urban economic network. According to Alderson and Beckfield: “The fate of cities has become increasingly tied to their relative position in international flows of corporate investment” (Alderson and Beckfield, 2004). In addition, as Wall points out, “the importance of cities in a globalizing world is strongly associated with their hierarchical positions (centrality) in relation to other cities and the interdependencies (structure) that they exhibit with one another” (Wall, 2009, p.16).

The current global urban economic network core is concentrated in a few cities located in North America, Europe and the Asia-Pacific. Connectivity is relatively much stronger between these regions than between other regions in the Northern and Southern hemispheres. Furthermore, Africa appears almost marginalized. The overall structure of the global urban economic network is still strongly hierarchical; vertical ties connecting a multinational firm’s headquarters with its subsidiaries largely dominate over heterogenic ties, horizontal ties connecting the same multinational levels or competitive and complementary cities (Wall, 2009).

The world is undergoing an economic crisis that is especially affecting the core of the global urban economic network. Economic crisis are cyclic events; an economy, according to the economist Kondratiev, evolves in temporal cycles of 50-60 years. Additionally, “the down swing of a long wave is not just a slower rate of growth in production, but is more a period of structural readjustment to the previous phase of prosperity” (Wall, 2009). Historically, periods of economic crisis have always coincided with technological innovations that encourage the development of new leading industries and commercial sectors. Thus, crises have historically contributed to rearranging the global economic network and its respective urban hierarchies (Wall, 2009).

The current economic crisis has accentuated the general scarcity of markets that the South was starting to face as a consequence of its own growth. Emerging nations in the Southern hemisphere have largely been dependent on exporting goods and services to the developed world in the Northern hemisphere. But, because the North can no longer absorb the growing production of the South, the model has ceased being sustainable, and there is a need for new markets. And in fact, according to King (2011), scarcity in markets like the situation the South is facing today, is leading to “the creation of the so-called Southern Silk Road, a network of new “South-South” trading routes connecting Asia, the Middle East, Africa and Latin America (King, 2011). Its creation appears to be an important development as an outcome of the current economic crisis.

Yet, expansion in the South-South market is a huge challenge, because the South is the region with the most rapidly expanding population in the world (Figure 1), and the South is also experiencing

---

<sup>2</sup>Competitiveness is the ability of cities to attract and use resources to generate wealth. The cities are assessed on nine indicators including: income, economic growth, innovation, jobs, prices and the presence of multinational firms (Economist, 2008).

soaring economic growth (Figure 2). But at the same time it is the least integrated region in terms of infrastructure, trade, capital and knowledge exchange.

However, according to King, South-South connections are set to revolutionize the global economy...In the same way that trade between the developed nations exploded in the 1950s and 1960s, we expect the 21st century to see turbocharged trade growth between the emerging nations” (King, 2011, p.1). And probably, as happened before the trade routes shifted, Southern cities will get a more prominent role in the new economic order. Additionally, as King points out, “if the emerging nations are ever going to experience living standards approaching those now taken for granted in the developed world, they will increasingly have to trade with each other”(King, 2011, p.7).

Some GDP indicators in the South show that the South is ripe for the expansion challenge. In Figure 2, increases in the per capita prospects for the biggest economies are presented; by 2020 some Southern economies are predicted to surpass the existing largest economies. This is because, according to Wall: “Increases per capita are related to: technological progress of physical and technological embedded capital, improving human skills, education, organizational ability, integration of national economies through trade in goods, services, investments and intellectual and entrepreneurial interactions”(Wall, 2009, p.12). This could mean that the basic factors enabling the emergence of the South-South market are already in place and growing in strength.

Thus the South economies do not need to start from scratch. The following is a list of some of the dynamics already occurring within the South-South network (Division of International Trade and Integration of ECLAC, 2010, Division of International Trade and Integration of ECLAC, 2010), (Teunissen, J. J. and Akkerman, A., 2005):

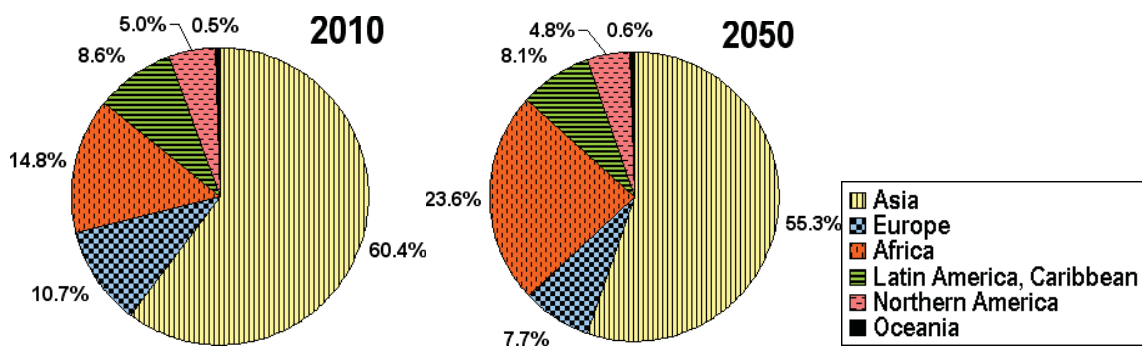
1. The profile of emerging economies has been raised, not only in global production and trade but also in international finance and governance.
2. South-South FDI is rising. Intraregional FDI in developing Asia, Latin America and the Caribbean are showing signs of entering an important stage of international expansion.
3. South-South trade has doubled within a 10-year period. Trade agreements in the form of sub-regionally integrated market schemes/partnerships have increased in Africa and South America and amongst the South Pacific countries.
4. The Chinese market is cushioning the effects of the global crisis.
5. Export growth has been stronger for South American countries than for Mexico, Central America and the Caribbean, following the strong demand for commodities from China and other developing Asian countries.
6. Japan has enhanced its economic relationships with Latin America and the Caribbean through Public-Private Partnerships (PPPs). Such cooperation is in fact one of the pillars of Japanese external economic policy. Latin America and the Caribbean have benefited from Japanese ODA,<sup>3</sup> not only to develop economically and socially, but also to foster innovation and scientific and technological development.
7. The expansion in emerging economies has not been confined to the countries known as the BRICs (Brazil, the Russian Federation, India and China). Several Southern emerging economies grew strongly in 2010, with the potential for long-term sustained growth. This is because these countries have large, young populations; a positive macroeconomic balance; low public debt; reasonably diversified exports; relatively sophisticated financial systems; and good prospects for political stability. Indeed, South American countries in general have

---

<sup>3</sup>Japan's Official Development Assistance. Japan has utilized its ODA to actively support economic and social infrastructure development, human resource development, and institution building, contributing to the economic and social development of developing countries.

displayed great export dynamism, and are strongly associated with exogenous factors such as the renewed strength of global demand for their raw materials, with a consequent rise in prices for these goods.

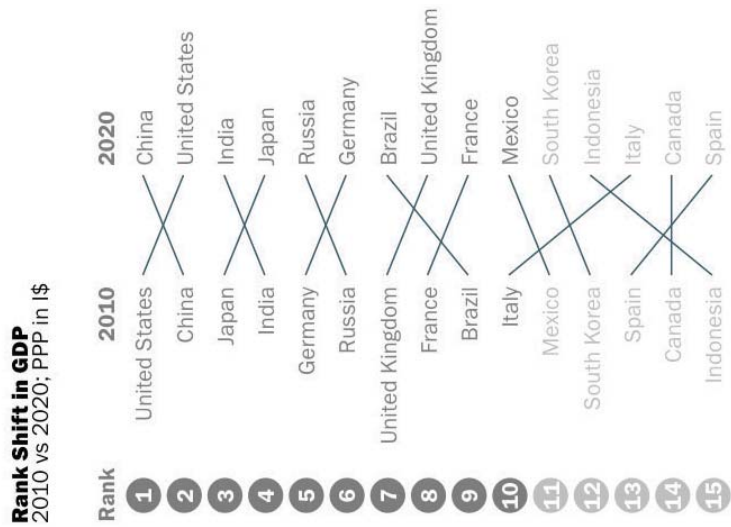
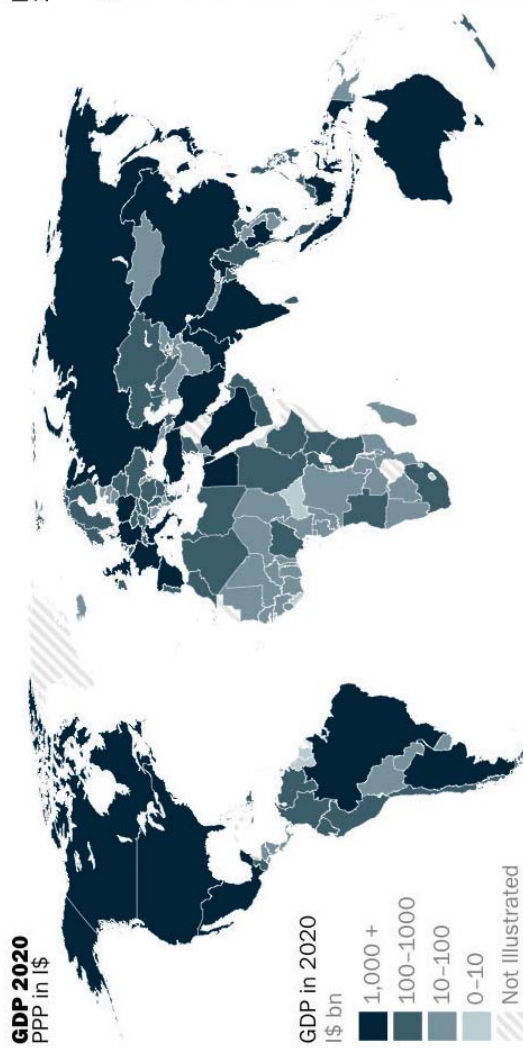
8. South-South economic networking embodies business models that are more informal, flexible and less hierarchical than Western models, and are as a result often more appropriate to the global South`s context.
9. Goods produced in the emerging countries for internal consumption are cheaper and simpler than goods produced by Western counterparts, and thereby are more marketable across the emerging world.
10. In one particular case, intra-African trade data reveals that goods, which are mostly natural resources, traded internally are more sophisticated than those traded with partners outside the continent (Teunissen, J. J. and Akkerman, A., 2005).



**Figure 1: World Population Prospects**

(United Nations, Department of Economic and Social Affairs, Population Division, 2011)

DATAGRAPHIC  
**Countries and Consumers**  
 TOP 10 BIGGEST ECONOMIES: 2010 VS 2020



**Figure 2: World GDP in PPP terms: 2020**  
 (Goldman Sach's Global Economics, 2010)

## 1.2 Problem Statement

Currently the world is undergoing an economic crisis that is hitting the global urban economic network at its core. Yet while North America, Europe and parts of Asia-Pacific are undergoing a severe crisis, the periphery of the network is enjoying an economic boom.

“**South Asia** has experienced unprecedented growth, averaging close to 6% per annum since the 1990s. **Indonesia's** economy, the largest in the region, grew 6.3 % in the first quarter of 2012. At the same time, foreign direct investment surged 30 % as Jakarta regained coveted investment grade credit status.” (Reuters, 2012).

“**Latin America's** economic good times will continue to roll. The fund's new forecast for economic growth in Latin America is 3.7% in 2012, and 4.1% in 2013” (Wall Street Journal, 2012).

“Despite global slowdown, **African** economies are growing strongly” (World Bank, 2012). The World Bank goes on to comment that Sub-Saharan Africa is expected to grow at 4.8 % in 2012, broadly unchanged from the 4.9 % growth rate in 2011 and largely on track despite setbacks in the global economy.

During 2012 Middle East was the world region with highest growth of FDI outflows, as well as the only world region increasing its volume of FDI outflows. (The Financial Times Ltd, 2013)

If, as Wall argues, “behaviour in one region can rapidly be transmitted to other parts of the world” (Wall, 2012, Wall, 2012), how is it possible that the economies of the global South seem still to be progressing? Does this mean that the global economic network is being reshaped?

## 1.3 Research Objectives

This study will combine descriptive and explanatory approaches to provide an understanding of the contemporary structure of the South within the world system, and the causes of the transformation of the global urban economic network.

### 1.3.1 The Descriptive Approach

In the first part of this study a dataset based on Foreign Direct Investment (FDI<sup>4</sup>) will be analysed to find flow trends and patterns, especially in the global South. The FDI database covers about 126,515 worldwide transactions above €1 million, over a period of 10 years. Thus, it allows longitudinal analyses of the evolution of the global urban economic network (Financial Times Ltd., 2013).

FDI is a flow originated by a multinational enterprise's (MNE) decision to relocate part of its activities in a foreign country. The aim of such a decision is to benefit from the particular advantages of the new location to get the highest return on investment. In addition, FDI optimises the allocation of the firm's resources on a worldwide basis and extends the control power of the investing firm over the new location (Athukorala, 2009).

The inter-city linkages created by the FDI flows contained in the data set will reveal the development of the network in the so-called “periphery”. Until now the world city research approach has been criticised for focussing mainly on a number of the world’s major metropolises; however, that does not register many urban economic linkages at the peripheral level (Surborg, 2011). This peripheral level corresponds to a large extent with the global South, which is the subject of study for this research project.

### **1.3.2 The Explanatory Approach**

The second part of this study will use location factors to test the results from the first part of the study in order to understand: the processes behind the changes going on in the world economy, the factors impacting the decisions of multinational enterprises to invest in a given place and the consequences of such investments on specific countries and regions.

Location factors that make a particular region or country attractive to foreign investors are determined through a combination of comparative advantages in the international production and domestic investment climates.

Location factors differ according to the type of investor. Producers engaged in serving domestic markets (‘market seeking’ investors), firms involved in extraction and processing of natural resources both for selling in the domestic market and exporting (‘resource seeking’ investors) and firms engaged in production for the global market (‘efficiency seeking’ investors) have different goals, and thus focus on different local factors. Dunning (1998) adds another category to the classification of investors, ‘strategic asset-seeking’ investors. These are FDI investments aimed at protecting or boosting advantage by acquiring new assets, or by partnering with a foreign firm.

The term ‘investment climate’ covers both the foreign investment regime (rules governing foreign investment and specific incentives for investors) and factors in the general investment environment that has an impact on investment decisions such as political stability, macroeconomic environment and attitude of the host country towards foreign enterprise participation (Athukorala, 2009).

Once industries become more knowledge intensive, the availability of intangible and created assets grows in importance in determining multinational enterprises’ location decisions. One especially important intangible asset is intellectual capital. As for created assets, some examples are innovation friendly policy frameworks and spatial clusters (Dunning, 1998).

## **1.4 Research Questions**

- What are the current trends in the global economy?
- What are the implications of the global financial crisis on the worldwide urban economic network?
- What are the dynamics contributing to the reshaping of the network?
- Where are investments flows shifting to and for which industries?
- Are the states in the global South developing the necessary assets to compete globally?



Hypotheses about the outcome of the research:

The global urban economic network is reshaping the links between cities of the global South. The final outcome could evolve into one of following forms:

- First, a reproduction of the current North-South hierarchical pattern, with emerging headquarters in Asian cities and subsidiaries in African and South American cities.
- Second, a new pattern with South American and African cities achieving similar degrees of competitiveness as global Asian cities. The global urban economic network could become heterarchic, connecting the whole world in a more heterogeneous way.
- Third, a combination of the two: hierarchical patterns are maintained with cores in the USA, Europe and Asian cities, with South American and African cities becoming more competitive due to their strong regional markets and the launch of stronger South-South economic relations.

This study aims to provide empirical results regarding the transformation of the global urban economic network.

## **1.5 Significance of the Study**

By giving an account of the particularities of perspectives on South-North and South-South relationships, the empirical research contributes to theory development, and to urban development studies on industrial location, infrastructure and communication development. In addition, given the pace of global market integration, it is important to understand the processes shaping the world economy and its consequences for the different regions, as well as to develop appropriate models and policies for the development of those regions.

This study will contribute to bridging the gaps identified by Murphy in his 2008 paper about economic geography and the global South.

- Most contemporary theories in economic geography are derived from field research in Western Europe, North America, and post-1980s East Asia.
- Economic geography's current research practice only emphasizes 'whats', 'whos', and 'wheres' that are core-based.
- Research about the global South is not yet part of a coordinated theory but just an assortment of case studies on a variety of topics and questions; it fails to communicate broader messages or is unable to integrate or relate its work to studies based on the core economies.
- The global South remains important from a representational perspective, but it is not viewed as a source of theoretical inspiration or as an empirical centre from which scholars can 'theorize back' at the Anglo-European research community (Murphy, 2008).

## **1.6 Scope and Limitations**

There are several constraints in this study because of the lack of availability of necessary data:

- The analysis is based on the World City approach; but because of the extent of the geographical selection and the limited availability of location factors at the city level, the data was aggregated at a country level. Because of this the outcomes of the analysis on

competitiveness and complementarity as well as the explanatory part of the research will be more general, because is a broader view.

- Additionally, this study offers only a partial view of the world. The network analysis concerns only FDI; other types of global networks; e.g. trade and migration, have not been studied.

## Chapter 2: Literature review

This chapter combines insights of literature on concepts related to the global urban economic network, globalization, geographical network trajectory, the economic crisis and the global possibilities.

### 2.1 The Global Urban Economic Network Concept

For as long as there has been economic theory, cities have been considered centres of economic exchange; more recently, a new area of study called ‘world city research’ has been established to provide information about the implications of capitalist exchanges for urbanization. Its research focuses on the division of labour at the global level, the position of urban centres in the world system, and the evolution of the urban economic system (Surborg, 2011).

The concept of a global economic urban network has its origins in world city research. Key elements for the development of the concept are a limited number of empirical studies, which are limited due to the scarcity of appropriate raw data. Data selection determines the scope, the accuracy and even the pace in the development of urban theory. Yet, one of the difficulties of empirical analysis on world cities networks is finding data for transnational analyses, since data is in general collected only at a national level to meet national requirements.

In this section, I will describe the evolution of world city research and the relation between developments in the theory that are linked to data selection. I will end this section by reviewing some of the criticism the theory has raised about its capacity to thoroughly describe core-peripheries relations.

The concept of ‘world city’ was developed in 1966 by Peter Hall. In his book *World Cities*, he identifies cities as places where a disproportionate part of world business, including the exercising of political power, takes place (93 Hall, P. 1966, p.1). Although Hall recognized global influences, his analysis was focussed on individual cities, and not on interconnections between cities.

Friedman and Wolff commenced what we now know as world city research in 1982. They recognized that processes and relationships between world cities articulated a global network, which constitutes a central component of the global economy. Their research determined particular cities’ statuses by analysing their political, communication, transport and economic characteristics; the economic was viewed as having great impact on urban life. Their analysis considered general relations between multinational corporations based on a limited number of cities.

Saskia Sassen (*The Global City*, 1991) narrowed the focus to producer services companies.<sup>5</sup> She saw the flows from producer service companies as key to determining the global network since they provide the basic services necessary for any other further investment. She also demonstrated that producer service companies function on a global scale, thanks to developments in communications that link local investment opportunities to global circuits. She also pointed out that leading producer service companies links, with their branches and affiliates create a network of world cities. And these ‘World cities’ power, strength and status are determined by the strength of their producer services companies. According to Surborg (2011) research based on producer services company’s data, only refers to the power abilities of the companies themselves, but does not provide information about intercity relationships.

---

<sup>5</sup>Service providers, including banking, accounting, insurance and law.

In the 1990s, Castells (1996) introduced the concept of cities as processes; he argued that flows of ideas, goods and people shape cities. Castells also argued that world city research cannot analyse the character of the network itself only through comparative analysis of data attributed to individual cities.

Recent development in world city network research, undertaken in 2011 by Wall (2011), is based on top 100 global multinationals in 2005. Wall's data set includes corporate ownerships between multinationals and their subsidiaries, their industrial sectors and their city locations. Wall classified the data according to levels of ownership, from headquarters to subsidiaries reaching till resource and production oriented levels. In his study producer service multinational networks are compared to the entire network of all multinationals. His network analyses reveal the coexistence of hierarchical and heterarchical structures, categories of nodes and connectivity strengths between them.

The challenge that still remains for world city network research is to develop a comprehensive set of data that permits an empirical analysis of the world city network beyond the core, thus overcoming criticisms such as:

- The marginalization of specific zones, by using only a predetermined set of cities. "It privileges a certain type of economic development, while ignoring others".<sup>6</sup>
- Narrowness of point of view: snapshot views of the network make it impossible to see the transformation of the networking process over time.
- Insensitivity to urbanization processes in the global South, because it bases its theoretical advances only on the empirical examples and perspectives of the global North. Interaction with cities in the third world needs to be part of the analysis of the world economy. (Surborg, 2011).

According to Taylor and Oinas (2006) a context which allows the emergence of world city networks is globalization, which I will discuss in the next section.

## 2.2 Globalization

Three globalization concepts are relevant for my study of the development of the global urban economic network in the global South.

The first, developed by Scott (2001), is about the geography created by globalization that goes beyond a city's borders. As globalization makes the world more connected, archipelagos of city-regions emerge. These global city-regions are a broader geographical concept than world cities. But, like cities they have a density of people, capital, knowledge and culture, with complex internal and external relations.

In a globalizing world, city-regions form a worldwide network of economic relations. These regions have competitive advantages for firms, but to control them requires new political and social institutions (Scott, 2001).

---

<sup>6</sup>For instance the Southern Hemisphere has been neglected and only part of the East has been included in the analysis.

The second concept, developed by Van Hamme and Pion (2012), pays attention to the interactions between local and global and tests the relevance of the world city approach in times of globalization. Globalization not only highlights the interaction between state specific and global structures to produce outcomes that are context-specific (Flint, C. 1996, p.500), but are also determined by internal power relations and structures that are path dependent (Van Hamme and Pion, 2012).

In their paper “The Relevance of the World System approach in the era of Globalization”, Van Hamme and Pion confirm that economic flows, trade and foreign direct investment still separate core and peripheries. Most of the current empirical research demonstrates that the core–periphery division of the world still predominates, and economic flows continue to be mediated by traditional power relations with traditional core countries still in a higher position in the international division of labour. While the core countries are characterised as having intensive reciprocal relations and strong internal coherence, peripheral countries are characterised as having few and asymmetrical economic relations with a limited number of core countries. Additionally the peripheral countries appear only as sellers of primary products. Moreover, peripheral countries do not form cohesive groups.

Additionally in their research, Van Hamme and Pion, identified two new elements in the world system. First, the emergence of Eastern Asia as a new core area. Second, major types of semi-peripheries as the large non-core countries (Brazil, China and India), hearts of regionalization processes

Finally, Van Hamme and Pion confirmed the current relevance of the world-system approach to capture flows across the world, because flows are at the heart of this new network/globalization paradigm, as illustrated by Castells’ (1996) in his concept about space of flows.

The last concept relevant to my study, developed by Das (2010), is about the growing integration of emerging market economies (EMEs<sup>7</sup>) into the global financial markets. EMEs are “contributing to financial globalization of the world economy” (Das, 2010, p. 46) and benefitting from it.

The rapid growth of financial assets in EMEs improves their financial intermediation, enables diversification of risks for investors, and reduces the need for expensive bank capital for entrepreneurs. The growth of financial assets is associated with higher economic growth in the EMEs.

The importance of EMEs has also been growing for business corporations based in the advanced industrial economies. They are important markets in their own right, with their large and growing middle classes, a source of value-conscious customers as well as creative entrepreneurs. The EMEs impact on the global economy is now visible, individually with EMEs like China, but also as a group (Das, 2010, p. 49).

According to Dicken (2011), the globalization process is not an end-state, but a set of processes operating unevenly in time and space. As a result of these on-going processes, the nature and the degree of interconnection between different parts of the world are in continuous flux.

---

<sup>7</sup> Emerging Market Economies, economies which market level is not as efficient as in advance economies, but having a physical financial infrastructure. The emerging status is achieved by “implementing macroeconomic policy reforms, liberalizing their economies and adopting market-friendly economic and financial policies, which resulted in a sounder economic policy structure compared to the other developing economies” (Das, D. K. 2010, p.49).

## 2.3 Geographical Network Trajectory

The global system is a network of networks that are geographically embedded (Dicken, 2011).

The establishment of any particular network does not occur in a vacuum, it is built in a geographical space that has its own history. Because of this, also the establishment of the global urban economic network does not depend merely on economic factors. Moreover, it is a social construct that evolves. With all of this in mind it is important that we revise the concept of the geographical network trajectory.

The geographical network trajectory is a concept concerning the evolution of networks. According to Glückler, it “describes a geographically and historically specific development path of a network, in which the formation and dissolution of ties in earlier stages generates cumulative propensities for the formation and dissolution of ties in the future, and in which the mechanisms of path-disruption and variation are endogenous” (Glückler, 2007, p. 622).

In his “Economic Geography and the Evolution of Networks”, Glückler states that through the analysis of the interactions in networks, it’s possible to advance our understanding of regional economic development.

In his main theory on the evolution of a geographical network trajectory, he argues that a geographical network trajectory involves mechanisms that lead to path-dependence and mechanisms that lead to path-destruction, and additionally, the emergence of a new variety of network. Glückler secondly presents his concept of ‘network’, where relations in the network are the focus of his analysis, and he argues that the structure of the relationships may draw expectations of particular actions. Thirdly, he presents two views on how geography influences networks:

Proximity affects network formation: Glückler criticizes the idea of ‘spatial causation’, because it ignores communication and transport technologies.

Place makes a difference: Glückler argues that a place and its network trajectories influence each other.

Glückler then goes on to explain the role of selection, retention, and variation in the evolution of network trajectories and their effects on geography. The geographical network trajectory evolution starts with selection. The networks are scarce resources and therefore each network formation implies an opportunity cost and return of utilities in every selection. Retention refers to the effect of past choices on the propensity for future selections of networks. On one side, retention is affected by geographical factors such as local and organizational inertia, on the other side, on three endogenous factors:

Preferential attachment: increased connectedness improves likelihood of future alliances.  
Embedding: new networks are attracted by trust or referrals, and emerge around established strong ties.

Multi-connectivity: new links are more likely to appear between already connected firms.

Variation in network theory is understood as a change in tie selection as affected by endogenous factors.

For Glückler (2007, p.630), “Evolutionary network change is subject to cumulative mechanisms of retention which create path-dependent network trajectories”. A network theory like Glückler’s helps to explain economic and geographic elements present in the global urban economic network from a more evolutionary approach.

## **2.4 Competitiveness**

The concept of competitiveness is relevant to my research, since it interconnects different scales of geographical economic activity (local, regional and global). It is important to understand how local factors, such as economic innovations, institutions and policies affect: conditions for innovation and competition, productivity, the relations with global networks, and the attraction of foreign investors. And it is also important to understand how the level of productivity that is achieved determines the level of local prosperity and growth. (Schwab, K. 2012)

Competitiveness is usually used to refer to firm performance; it is regarded as a quality conferred to successful firms by the markets within which they operate, as result of the firms responding correctly to market signals. It represents the validation of a firm's ability to survive, compete and grow in markets subject to international competition.

In this study we distinguish between the concepts of regional and firm competitiveness.

Since the 1990s the concept of regional competitiveness has become a hegemonic discourse. Thus, the discourse is often problematic and confusing, because regions do not compete and act like firms do. This is because the actors and organizations involved in regional competitiveness are embedded in a territorial context that largely determines their behaviour and level of performance.

### **2.4.1 Regional Competitiveness**

A region's opportunities and constraints act as a selective environment for the establishment of multinational firms. Such factors attract firms whose activities fit into the local context. However, regions specific advantages are to a large extent locally constructed assets, hard to replicate or transfer elsewhere. Specific advantages a particular region might offer is comprise of intangible factors, such us knowledge and competence based, which are rooted in particular institutional foundations.

Regions depend on their ability to constantly upgrade their economic base to keep their competitiveness and their unique value for local firms. Successful regions achieve variety and new knowledge in the region by developing extra-regional linkages (Boschma, 2004).

However, the regional competitiveness discourse should also take into account the role of national and global forces that shape their development. For instance, instead of just focusing on building capacity within regions, policies on regional competitiveness should also consider the relations between regions. Regions that lack behind in economic competitiveness are often stigmatised as having failed because of their own inefficiencies, when the problems may be in their broader institutional structures (68 Bristow, G. 2005).

### **2.4.2 Firm Competitiveness and The Theory of the Firm**

Understanding a firm's locational choices and organizational dimensions is essential for understanding and explaining the competitiveness of industries and its trajectories of regional development. According to Taylor and Oinas, understanding the firm and its rational behind, it is a necessity (Taylor and Oinas, 2006).

- A firm is an entity with shifting boundaries negotiated over time and across territories.
- Specific industries are embedded in particular regions and thus their financial narratives determine the accumulation of capital and distribution in those regions.

- Firms influence the rules and regulatory regimes that shape their operations and around which they organize their production processes.
- The strategies of firms and their competitive choices affect the regions in which they are located.

However, the competitiveness of firms, in some instances, might be altogether disconnected from their regional location. This is certainly the case with multinational enterprises (MNEs). There is empirical research into the impact of multinational enterprises on firm innovation, which is viewed as central to regional competitiveness. This research suggests that factors internal to the firm may be as important, if not more important, than factors endogenous to the region in shaping a firm's innovative behaviour. Nonetheless, much small firm innovation tends to take place within vertical networks dominated by large multinational corporations (68 Bristow, G. 2005).

This innovation inherent to firms is spread around the world, once the world is becoming more connected, thanks to the multinational enterprises embedded in different regions. Indicators of this connectivity are the growth of trade and FDI between nations, because both of them are indicators of flows across borders

In fact, foreign direct investment growth is now bigger than trade growth, giving an indication that FDI is now the primary mechanism of interconnectedness within the global economy. Another measure of global integration is the importance of inward and outward FDI to a country's economy. Inward investments are the investments a country attracts, outward investment are the investments that the country invest into a foreigner country.

A common element behind trade and FDI is the multinational enterprise (MNE). Multinational enterprises control around two-thirds of world exports of goods and services, of which a significant share is intra-firm trade. That is, trade within the boundaries of the firm but across national boundaries. A rough estimate is that approximately one-third of total world trade is intra-firm (Dicken, 2011). Since FDI investments are investments by one firm in another, with the intention of gaining a degree of control over that firm's operations, once FDI grows, the global power of multinational enterprises grows with it.

Another important fact is that multinational enterprises international value-added activities determine the geographic distribution of FDI. Since location is a variable affecting the global competitiveness, multinational enterprises location decisions are determined by the competitive advantage particular locations add to an multinational enterprises own core competences. According to Dunning (1998), two factors have grown in importance for these location decisions: *intangible assets* – intellectual capital in particular and *location-bound assets*. Both of these are created assets, influenced by governmental policies and or benefits deriving from spatial clusters.

## 2.5 The Economic Crisis and Global Possibilities

To finalise the literature review, this section briefly revisit the historical context of globalization and the on-going economic crisis.

According to “The Age of Transition” (Hopkins, T., Wallerstein, et al., 1998), the current economic crisis in the world system cannot be explained simply as part of the downfall in Kondratieff's 50-year economic cycle. The character and the scale of the current economic crisis symptoms seem to indicate that it is part of a longer 500-year cycle, which has determined the hegemony of the world order.

It is also possible that the collapse of both cycles may be coinciding.



As evidence for the 500 year cycle, the role of the USA in the world system has been steadily growing since 1870. In 1945 it was the only major industrial power that emerged from the 2<sup>nd</sup> world war intact and strengthened. This economic advantage was turned into political, military and cultural advantages during the post-war period. 1945 also represents the beginning of a Kondratieff cycle, a point at which the world economy entered a period of unprecedented economic expansion with the USA as its engine and driving force. According to Hopkins, “US transnational corporations in this period accounted for the overwhelming majority of FDI”. The huge expansion of world industrial production created a strong demand for raw materials that resulted in the expansion of the income base to the peripheral areas of the world system.

The peak of prosperity ended around 1967: profit levels fell, the oil crisis came and the 1950s’ monopolies in leading sectors stopped growing. In the period between 1970 and 1980 the overall trend in the global economy was stagnation. There was a worldwide slowdown in the growth of production, and effective demand of products, and a rise in unemployment rates. The resulting decline in the profits of the manufacturing sector had three structural consequences: 1) a decision to reduce the production costs (labour costs) by changing the locations of production; 2) a shift in the investments sphere from production to financial services; 3) an increase in military expenditures in the Third World, which resulted in the enhancing intra-state violence and civil wars; while in the USA unemployment was reduced at the cost of increasing the national debt. In locations, the Third World and the USA recession, social unrest, lower standards of living, inter-ethnic conflicts and radicalism, seemed to be the consequences.

Going back to Kondratieff’s economic cycle theory, Hopking argues that “The coincidence of a Kondratieff B-phase<sup>8</sup> with the beginning of hegemonic decline poses special problems for great powers, especially for those located in the core zone. Their internal equilibrium is much more precarious than usual, and fear of social unrest at home becomes the compelling priority”. Given the relative decline of the economic position of the USA, the world system has become triadic: with the USA, Western Europe and Japan competing with each other.

The struggle between USA, Western Europe and Japan is, amongst other things, an attempt by each of them to retain and augment their overall economic strength while sustaining their living standards. The fact that there are three makes the situation unstable, it is difficult for them to agree among themselves, and tensions increase with the temptation to reduce the structure to a dyad. Currently the USA has the largest existing markets, but a less efficient production structure than the other two powers. On the other hand, Japan has virtually the opposite circumstances, an efficient production structure, but insufficient internal markets to absorb its production. Western Europe seems to fall between the other two. They are all preparing to compete by constructing their own regional networks that include low-cost production zone countries. In this set up, Russia and China play an exceptional role by being at the same time big markets and sources of cheap labour, which gives them political leverage when negotiating with the major economic powers. (43 Hopkins, T 1998).

This brings us back to the crucial question of how the global South is reacting to the changes taking place in the North. This study will take a look at the market transformations occurring in the global South, that have resulted from the struggle described above to get and maintain markets.

---

<sup>8</sup> The downfall, decline period of the economic 50 years cycle.

## **2.6 Conceptual Framework**

According to the literature there are two major elements that determine competitiveness, location factors and networks. And it is clear that, the formations of networks are evolutionary processes. In our case, the global urban economic network is shaped by the regions, cities, industries and firms that it connects, including their specific context, history, culture and previous relations.

In general, globalization allows the emergence of world city networks. World city network development, in turn, depends on the dynamics between the geographical network trajectories and the choices and strategies of the multinational firms and regions in competition with each other (See Figure 3).

Considering that the main objective of this study is to identify the forces shaping the global urban economic network in the global South, the identification of the location factors contributing to the attraction of foreign investments in the global South is essential.

Figure 3: Conceptual framework



## Chapter 3: Research Design and Methods

### 3.1 Research objectives

Research objectives:

- Descriptive (who, when, where and how). During the descriptive part of this study, FDI flows will be analysed. The analysis will provide clues about the development that has occurred during the last 10 years, and the shape of the global urban economic network in the global South.
- Explanatory (why and how). During the explanatory part of this study, the analysis will focus on the relationships between location factors contributing to countries competitiveness, and the attraction of FDI.

The research approach is quantitative and the data sources employ secondary data.

The research questions were revised in accordance with the literature review, the research methods and the availability of secondary data.

### 3.2 Revised Research Questions

Main Research Question:

What is the state of the global urban economic network in the global South?

Specific Research Questions:

1. What have been the trends and patterns of FDI in the global South during the last decade?
  - What is the growth of all FDI to countries in the global South?
  - Which five industrial sectors have attracted most FDI in the region?
  - What are the rank, hierarchy and position of the countries attracting FDI in the region? For all industrial sectors combined, and for the five major industrial sectors.
  - Based on investment profiles, which countries are competitors in the region?
  - What are the core, peripheries and semi-peripheries of FDI flows in the region?
  - What is the geographical distribution of FDI flows in the region?
  - What is the relation between global South and general global FDI investments?
2. Which location factors have been crucial for attracting FDI to the global South?
  - What are the factors affecting Multinational enterprises location decisions?
  - How do factors inside the region differ from factors outside the region?

### 3.3 Operationalization: Variables and Indicators

(See Table 1)

#### 3.3.1 Dependent Variable Y = FDI

The Y variable represents the number of FDI<sup>9</sup> flows (hereafter called ‘inflows’) into a certain country, i.e. cross-border investments for Greenfield projects. Greenfield investments are

---

<sup>9</sup>The FDI information was extracted from the fDiMarkets database.

investments from a foreign company aiming to start a new venture in another country; they often lead to construction of new operational facilities. Because Greenfield investments are reliable indicators of the development of ties between firms from different countries, this study is based on Greenfield data. The inflows represent the number of investments in a new physical project or the expansion of an existing one. Those investments are associated with the direct creation of jobs as well as long-term capital investment. Joint ventures are only included where they lead to a new physical operational facility (Financial Times Ltd., 2013).

The data used for this study was 50,319 investments. The data used was the number of investments instead of the values of the investments. This is because about 60 % of the values in Greenfield investments are not known and have to be estimated by the data provider. Thus, the use of a high percentage of estimated data for data analysis can distort the results and be misleading. However, there is empirical proof that the correlation between the number of investments and their value is very high. Because of this this, the use of number of investments is a good proxy for the investment values (Wall, R.S. and Burger, M., 2012).

### **3.3.2 Independent Variables X = Location factors**

The location factors used in this study have been extracted from the Global Competitiveness Index. The index defines “competitiveness as the set of institutions, policies, and factors that determine the level of productivity of a country” (Schwab and World Economic Forum, 2012, p.4). The report contains detailed profiles for 144 economies, and highlights their competitive strengths and weaknesses. The data tables in the Global Competitive Index display relative rankings for about 100 variables.

The indicators in the Index have been chosen to match the 12 pillars of competitiveness. The pillars are the groups under which the different components measuring competitiveness are classified. These components are grouped into 12 pillars of competitiveness. It should be noted that the indicators in the Global Competitiveness Index are not independent; they reinforce each other and weaknesses in one area have negative impacts in others. Additionally, the Global Competitiveness Report sees competitiveness as dependent on the development stage of a country (See Figure 4).

#### **The Global Competitiveness Index (X<sub>0</sub>)**

The Global Competitiveness Index (GCI) gives each country a general score that is the result of the aggregations of scores from the indicators level.

#### **BASIC REQUIREMENTS**

The GCI assumes that economies in the first stage of development are factor-driven, and compete based on their available resources: a low-skilled labour force and natural resources. Companies in first-stage economies compete in terms of the price they demand for basic products or commodities. Their low level productivity is reflected in the low wages of their labour force. Competitiveness at this stage depends on:

#### **Institutions (X<sub>1</sub>)**

These institutions are comprised of the established national legal and administrative frameworks regulating the interactions between individuals, firms, and governments. Key indicators:

- 1.01 Property rights
- 1.02 Intellectual property protection

- 1.03 Diversion of public funds
- 1.04 Public trust in politicians
- 1.05 Irregular payments and bribes
- 1.06 Judicial independence
- 1.07 Favouritism in decisions of government officials
- 1.08 Wastefulness of government spending
- 1.09 Burden of government regulation
- 1.10 Efficiency of legal framework in settling disputes
- 1.11 Efficiency of legal framework in challenging regulations
- 1.12 Transparency of government policymaking
- 1.13 Government provision of services for improved business performance
- 1.14 Business costs of terrorism
- 1.15 Business costs of crime and violence
- 1.16 Organized crime
- 1.17 Reliability of police services
- 1.18 Ethical behaviour of firms
- 1.19 Strength of auditing and reporting standards
- 1.20 Efficacy of corporate boards
- 1.21 Protection of minority shareholders' interests
- 1.22 Strength of investor protection

### **Infrastructure (X2)**

The availability of an appropriate and functional infrastructure determines the location and kinds of economic activities than can be developed. Key indicators:

- 2.01 Quality of overall infrastructure
- 2.02 Quality of roads
- 2.03 Quality of railroad infrastructure
- 2.04 Quality of port infrastructure
- 2.05 Quality of air transport infrastructure
- 2.06 Available airline seat kilometres
- 2.07 Quality of electricity supply
- 2.08 Mobile telephone subscriptions
- 2.09 Fixed telephone lines

### **Macroeconomic environment (X3)**

Macroeconomic environment stability favours business and as result also competitiveness. Fiscal deficits and debts limit a government's capacity to provide services efficiently and to invest in other measures enhancing competitiveness and thus detract from macroeconomic stability. Inflation rates also affect the performance of firms and their economy growth; low inflation is positive for the macroeconomic environment stability, high inflation is negative. Key indicators:

- 3.01 Government budget balance
- 3.02 Gross national savings
- 3.03 Inflation
- 3.04 Government debt
- 3.05 Country credit rating

### **Health and primary education (X4)**

A healthy workforce and basic education increases efficiency and contributes to a country's competitiveness and productivity. In such countries firms can start to move up the value chain by producing more value-intensive products once they can count on the adequate human resources. Key indicators:

- 4.01 Business impact of malaria
- 4.02 Malaria incidence
- 4.03 Business impact of tuberculosis

- 4.04 Tuberculosis incidence
- 4.05 Business impact of HIV/AIDS
- 4.06 HIV prevalence
- 4.07 Infant mortality
- 4.08 Life expectancy
- 4.09 Quality of primary education
- 4.10 Primary education enrolment rate

## **EFFICIENCY ENHANCERS**

Once competitiveness increases in a country, productivity and wages go up. At this stage countries develop more efficient production processes and better product quality. Competitiveness at this stage is driven by:

### **Higher education and training (X5)**

In a globalized economy, pools of well-educated workers able to perform complex tasks and adapt rapidly to changing environments and production needs are essential. Key indicators:

- 5.01 Secondary education enrolment rate
- 5.02 Tertiary education enrolment rate
- 5.03 Quality of the educational system
- 5.04 Quality of math and science education
- 5.05 Quality of management schools
- 5.06 Internet access in schools
- 5.07 Local availability of specialized research and training services
- 5.08 Extent of staff training

### **Goods market efficiency (X6)**

An optimum exchange of goods requires a minimum of impediments to business activity from government intervention. Customer oriented businesses are forced to innovate and produce the right mix of products and services as dictated by supply-and-demand. Key indicators:

- 6.01 Intensity of local competition
- 6.02 Extent of market dominance
- 6.03 Effectiveness of anti-monopoly policy
- 6.04 Extent and effect of taxation
- 6.05 Total tax rate
- 6.06 Number of procedures required to start a business
- 6.07 Time required to start a business
- 6.08 Agricultural policy costs
- 6.09 Prevalence of trade barriers
- 6.10 Trade tariffs
- 6.11 Prevalence of foreign ownership
- 6.12 Business impact of rules on FDI
- 6.13 Burden of customs procedures
- 6.14 Imports as a percentage of GDP
- 6.15 Degree of customer orientation
- 6.16 Buyer sophistication

### **Labour market efficiency (X7)**

An efficient and flexible labour market ensures that workers are put to their most effective use in the economy and are motivated to perform well in their jobs. In an efficient labour market workers can shift between different production activities without causing social disruption. These factors add to countries talent base and attractiveness. Key indicators:

- 7.01 Cooperation in labour-employer relations
- 7.02 Flexibility of wage determination
- 7.03 Hiring and firing practices
- 7.04 Redundancy costs
- 7.05 Pay and productivity
- 7.06 Reliance on professional management
- 7.07 Brain drain
- 7.08 Female participation in labour force

### **Financial market development (X<sub>8</sub>)**

An efficient financial sector channels resources; citizen's savings or foreign investments, to their most productive uses, and it favours investment projects with the highest expected rates of return.

Key indicators:

- 8.01 Availability of financial services
- 8.02 Affordability of financial services
- 8.03 Financing through local equity market
- 8.04 Ease of access to loans
- 8.05 Venture capital availability
- 8.06 Soundness of banks
- 8.07 Regulation of securities exchanges
- 8.08 Legal rights index

### **Technological readiness (X<sub>9</sub>)**

The swiftness with which an economy adopts the latest existing technologies to enhance the productivity of its industries. The adoption of ICT in daily activities and production processes increase efficiency and innovation. Key indicators:

- 9.01 Availability of latest technologies
- 9.02 Firm-level technology absorption
- 9.03 FDI and technology transfer
- 9.04 Internet users
- 9.05 Fixed broadband Internet subscriptions
- 9.06 Internet bandwidth
- 9.07 Mobile broadband subscriptions

### **Market size (X<sub>10</sub>)**

The size of a country's local market is linked to productivity; large markets allow economies of scale for firms. In the era of globalization, markets are not restricted to the nation's borders; international markets can even substitute for domestic markets for small countries. Efficiency gains are achieved by the integration of market. Key indicators:

- 10.01 Domestic market size index
- 10.02 Foreign market size index
- 10.03 GDP (PPP)
- 10.04 Exports as a percentage of GDP

## **INNOVATION AND SOPHISTICATION FACTORS**

The final stage of economic development are innovation-driven economies, where wages in the country are so high that to maintain them, and the associated standard of living, businesses have to compete with new or unique products, services, models, and processes. Competitiveness at this stage is driven by:

### **Business sophistication (X<sub>11</sub>)**



Efficient production of goods and services benefits from sophisticated business practices. Basic elements of a country's business sophistication include, the quality of a country's business networks and the quality of firms' operations and strategies. Key indicators:

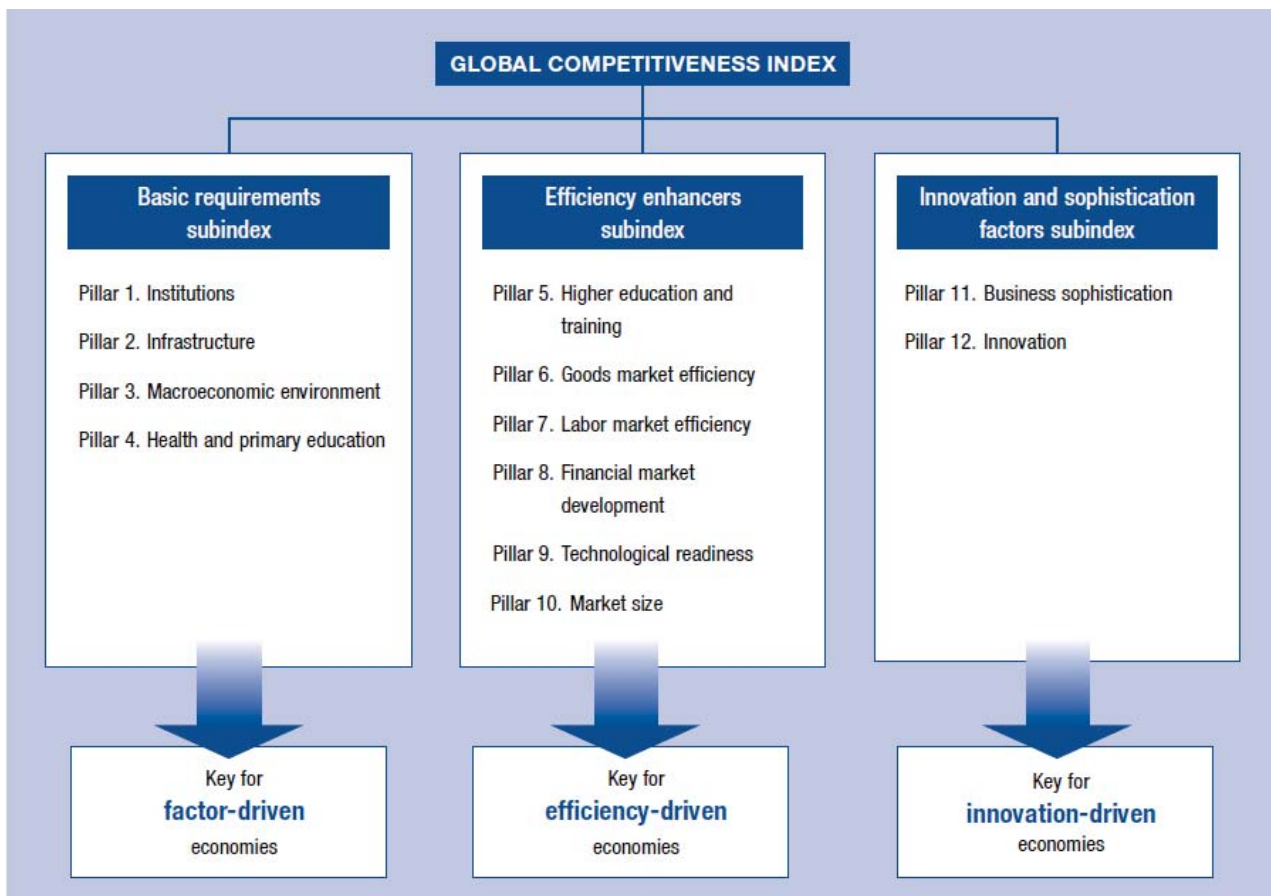
- 11.01 Local supplier quantity
- 11.02 Local supplier quality
- 11.03 State of cluster development
- 11.04 Nature of competitive advantage
- 11.05 Value chain breadth
- 11.06 Control of international distribution
- 11.07 Production process sophistication
- 11.08 Extent of marketing
- 11.09 Willingness to delegate authority

### **Innovation (X<sub>12</sub>)**

Innovation derives from technological and non-technological knowledge. Historically, technological breakthroughs have been the bases of many productivity gains that transform the way things are done and which open a wider range of products and services. Adopting existing technologies or making incremental improvements in other areas is no longer sufficient to increase productivity, in order to maintain a competitive edge firms have to move to higher value-added activities. Key indicators:

- 12.01 Capacity for innovation
- 12.02 Quality of scientific research institutions
- 12.03 Company spending on R&D
- 12.04 University-industry collaboration in R&D
- 12.05 Government procurement of advanced technology products
- 12.06 Availability of scientists and engineers
- 12.07 PCT patent applications

**(Schwab, K. 2012)**



**Figure 4: The Global Competitiveness Index framework**

(Schwab and World Economic Forum, 2012)

ANALYSIS TYPE		DATA	RESEARCH QUESTIONS	METHOD	SOFTWARE	ALL	PER SECTOR	DIMENSION
QUANTITATIVE	DESCRIPTIVE / WHAT?	FDI Markets	What is the growth of total FDI flows to countries? For the five most important industry sectors?	Trend Analysis Growth rates	EXCEL	Growth Volume	Growth Volume	TIME
		FDI Markets	What are the rank, hierarchy & position of countries attracting FDI? For the major industry sectors?	Inflows Outflows	UCINET	Nodes Position	Nodes Position	FUNCTIONAL
		FDI Markets	Which are the most important competitor countries in all? For the major industry sectors?	Manhattan Distance	UCINET	Competitors Similarity & FDI	Competitors Similarity & FDI	
		FDI Markets	What is the structure of (core, periphery) FDI flows country linkages? For each major industry sector?	Core-Periphery Analysis	NETDRAW	Linkages Structure	Linkages Structure	
		FDI Markets	What is the geographical distribution of FDI flows in the region? For each major industry sector?	GIS	NETDRAW	Geographic Distribution	Geographic Distribution	SPATIAL
	EXPLANATORY WHY?	Global Competitiveness Index FDI Markets	Which location factors are determinants for FDI attraction? For each major industry sectors?	Multiple Regressions (Cross-Section)	SPSS	Correlation FDI (Y) and Loc. Factors (X)	Correlation FDI (Y) and Loc. Factors (X)	CAUSE

**Table 1: Operationalization**

### 3.4 Data Collection Methods

Method: Secondary data analysis

Datasets: fDiMarkets and Location factors extracted from the GCI

fDiMarkets: The data used for the model is taken from the fDiMarkets database developed by The Financial Times Ltd. The dataset contains information on about 126,501 transactions in new investment projects and significant expansions of existing projects around the world from 2003 until 2012. The data allows performance of longitudinal analyses to identify growth trends of FDI involving inward and outward investments.

The dataset covers a number of industrial sectors, activities and city locations, as well as information on inward and outward investments to or from the global South. The data allows different network analyses e.g., indegree and outdegree, Manhattan Distance (to find countries competitors and their similarities in investment profiles), and core-periphery analysis (to determine networks structures and its linkages).

The Global Competitiveness Index is compiled by “The World Economic Forum”. It contains the benchmark factors that underlay national competitiveness, that determine economic growth and that help to explain the success of some countries in raising income levels and opportunities for their populations (Schwab and World Economic Forum, 2012). The index is available online. For this study, the average of the GCI indicators for the period 2003-2012 was calculated. This data set contains the location factors (X variables) necessary to run multiple regression models and find the relation with the dependent variable Y (FDI investments).

### 3.5 Sample Size and Selection

In terms of development, in accordance with the *Brandt Report (1980)*<sup>10</sup>, the world can be divided into North and South; this is a straightforward geographical division, except for the area including Japan, South Korea, Australia and New Zealand. The North is defined as richer and more developed, the South as poorer and less developed. (See Figure 5)

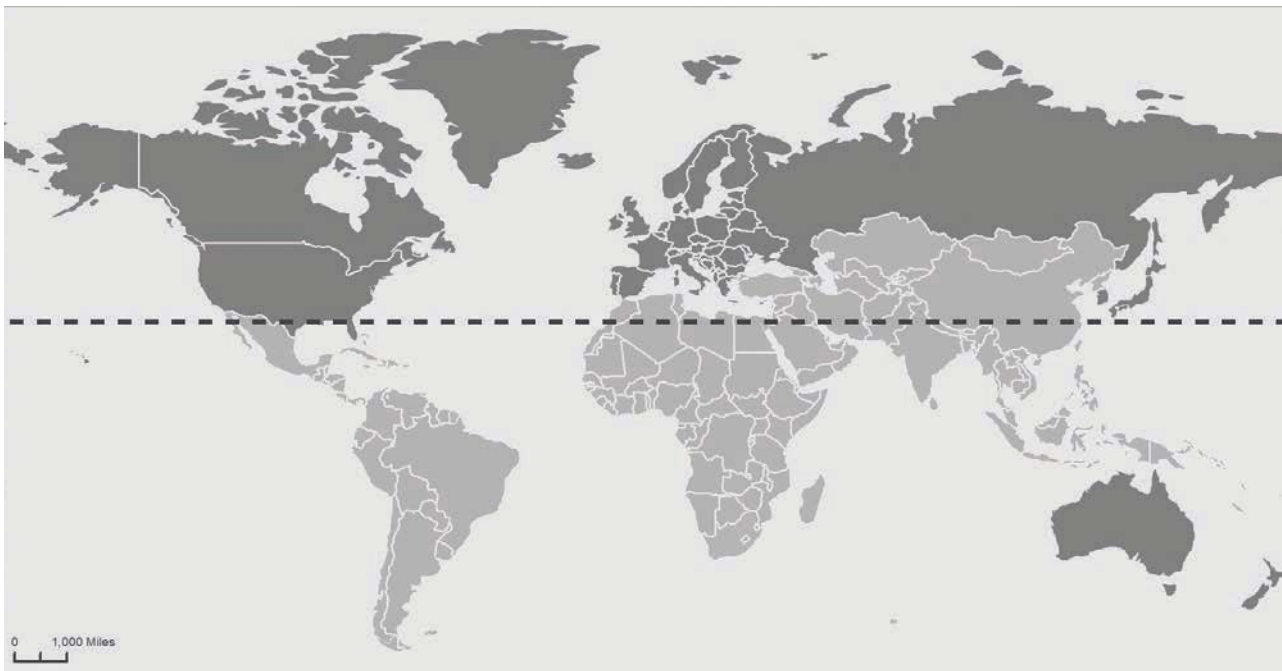
The North-South divide is already over 30 years old, and some of its countries have moved up in the development stage or have improved their human development status. However, the North-South division is not just geographical expression, but also a socio-economic and political division.

For the analysis carried out in this study, the South is made up of 128 countries<sup>1</sup> for which there is information available in the fDiMarkets database. The countries have been classified as belonging to 5 different world regions: 53 of the countries are located in Africa, 32 in the Asia Pacific, 29 in Latin America, 12 in the Middle East, and 1 in the Rest of Europe.

---

<sup>10</sup> The report: “North-South: A Programme for Survival” (Brandt, W. 1980), examines the challenges and responsibilities of international development in the late 1970’s.

Figure 5: The Brandt Line: The geography of the "North-South Divide"



(cargocollective.com, 2012)

### 3.6 Validity and Reliability

Validity:

This is ensured by using tools and methods already proven to be effective in measuring trends, growth of investment, competitiveness, and relevance of location factors.

Reliability:

- The selection of recognized sources for this study helps ensure the reliability of the secondary data analysis.

The Global Competitiveness Index uses statistical data obtained from internationally recognized agencies: the United Nations Educational, Scientific and Cultural Organization (UNESCO), the IMF, the World Health Organization (WHO), the World Intellectual Property Organization and the Organisation for Economic Co-operation and Development (OECD). In addition, the World Economic Forum's annual Executive Opinion Survey provides qualitative assessment when comparable statistical data are not available (Schwab and World Economic Forum, 2012).

- The Financial Times fDiMarkets database registers cross-border investments made worldwide. The data in the database is acquired and recorded daily by in-house analysts from the Financial Times newswires, as well as from internal information sources, other media sources, the world's top business sources, project data received from industry organizations and investment agencies and data purchased from market research. The projects identified are cross-referenced against various sources, with a focus on direct company sources (Financial Times Ltd., 2013).

- The data for my chosen geographical area has been completed and linked manually when necessary. Missing geographical information about multinational firms has been added and searched for using Google maps and the Batch Geocode programmes available online.
- Countries geo-coordinates for the generation of network maps in Net-draw were taken from the internet site [www.newstrackindia.com/information/worldinfo/Latitude-and-Longitude-of-Countries.html](http://www.newstrackindia.com/information/worldinfo/Latitude-and-Longitude-of-Countries.html).
- Diagnostics were performed to get “X” and “Y” data ready for the regression analyses:
  - Outliers were removed i.e. China in the South-South network
  - All data was log-log transformed to avoid heteroscedasticity
  - The multicollinearity of independent “X” variables was checked, performing VIF (variance inflation factor) tests. The variance benchmark used was  $\leq 10$ .

### 3.7 Data Analysis Methods

The purpose of this study is to analyse the inter-country network produced by firms’ locational decisions. The data compiled contains FDI linkages into, within and from the global South between multinationals and their subsidiaries.

The database covers the number of investments, the source and destination, locations, industrial sectors and activities involved in the inter-country networks.

The entire network and the five most important industrial sectors and activities were analysed separately. The location of each firm was identified at city level and at country level. (See Table 1 Operationalization,)

#### 3.7.1 Descriptive Analyses:

Trend analysis:

FDI growth  
 Dataset: fDiMarkets  
 Software: Excel

Inflows/ Outflows:

Rank, hierarchy & position of countries attracting FDI  
 Dataset: fDiMarkets  
 Software: UCINET

Manhattan Distance:

Most competitor countries  
 Dataset: fDiMarkets  
 Software: UCINET

Core-Periphery:

Structure of FDI flows and country linkages

Dataset: fDiMarkets

Software: Netdraw

GIS:

Geographical distribution of FDI flows in the region

Dataset: fDiMarkets

Software: Netdraw

### 3.7.2 Explanatory Analysis:

Stepwise multiple regressions:

Finding significant relationships between the dependent and independent variables

Dataset: fDiMarkets

Software: SPSS

---

<sup>i</sup> Africa: Algeria, Angola, Botswana, Burundi, Congo (DRC), Cameroon, Ivory Coast, Egypt, Eritrea, Ethiopia, Ghana, Kenya, Libya, Malawi, Mali, Mauritania, Morocco, Mozambique, Namibia, Nigeria, Rwanda, Senegal, South Africa, Sudan, Tanzania, Togo, Tunisia, Uganda, Zambia, Zimbabwe, Benin, Burkina Faso, Cape Verde, Central African Republic, Chad, Comoros, Djibouti, Equatorial Guinea, Gabon, Gambia, Guinea, Guinea Bissau, Lesotho, Liberia, Madagascar, Niger, Republic of the Congo, Sao Tome and Principe, Sierra Leone, Somalia, Somaliland, South Sudan and Swaziland. A&P: Afghanistan, Azerbaijan, Bangladesh, Cambodia, China, Fiji, Georgia, India, Indonesia, Kazakhstan, Kyrgyzstan, Laos, Malaysia, Mongolia, Myanmar (Burma), Nepal, New Caledonia, Pakistan, Papua, New Guinea, Philippines, Solomon Islands, Sri Lanka, Tajikistan, Thailand, Vietnam, Bhutan, Maldives, Micronesia, North Korea, Timor-Leste, Turkmenistan and Uzbekistan. Latin America: Argentina, Bahamas, Belize, Brazil, Chile, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, El Salvador, Guatemala, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, Peru, Trinidad & Tobago, Uruguay, Venezuela, Bolivia, Grenada, Guyana, Paraguay, Saint Vincent and the Grenadines, St Lucia and Suriname. Middle East: Iran, Iraq, Jordan, Kuwait, Lebanon, Oman, Palestine, Qatar, Saudi Arabia, Syria, UAE and Yemen. Rest of Europe: Turkey.

## Chapter 4: Research Findings

The following sections present the results of the analyses carried out in order to answer the specific research questions of this study.

The descriptive analyses (Section 4.1 - 4.4) were carried starting from a macro scale, the North South division and world regions, to a micro scale, focussing on individual countries, industrial sectors and activities, and firms.

For the explanatory analyses (Section 4.5) the relationships between the dependent and independent variables, two separate analyses were carried out, the first one for total investments destination South, and the second for investments South-North.

Key concepts and terminology used in the research findings:

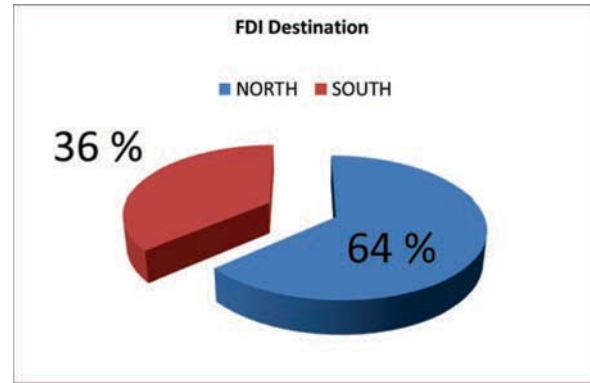
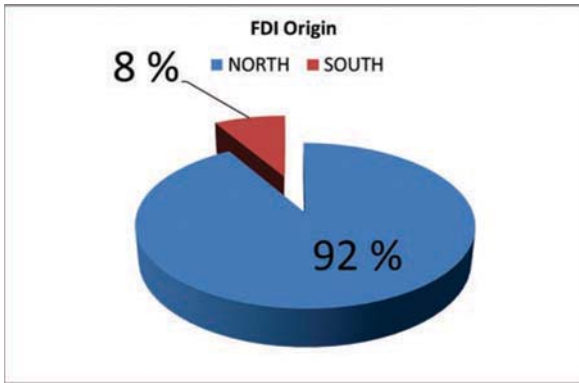
Origin:	The country or region producing the FDI
Destination:	The country or region receiving the FDI
World region:	North America, Latin America, Western Europe, Africa, Rest of Europe, Asia Pacific
South-South:	FDI origin South destination South
South-North:	FDI origin South destination North
North-South:	FDI origin North destination South
North-North:	FDI origin North destination North
Outdegree:	FDI sent to another country
Indegree:	FDI received from another country
Industrial sector:	Group of similar industries
Economic activity:	Activities required bringing a product or service from conception to consumption
Volume:	Number of FDI investments
Growth:	FDI volume change for a 10-year period
Node:	FDI destination or origin, its size determined by the number of investments it hosts
Ties:	Linkages between nodes, according the number of investments
Location factors:	Local factors attracting investments

### 4.1 Investment Trends

#### 4.1.1 North and South

From the fDiMarkets database (2003 – 2012) the total number of investments worldwide was 126,501. Of these, 92% originated in the North and 8% in the South; 64% had the North as their destination and the remaining 36%, the South (See Chart 1).



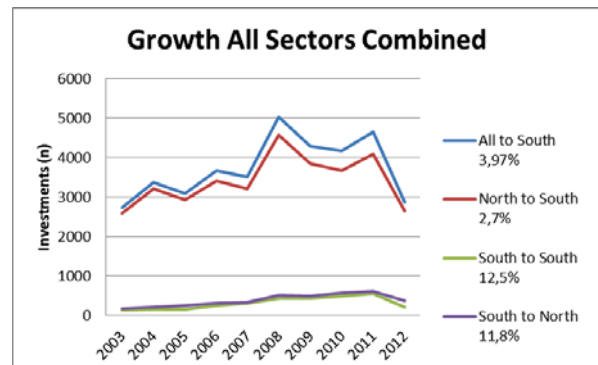
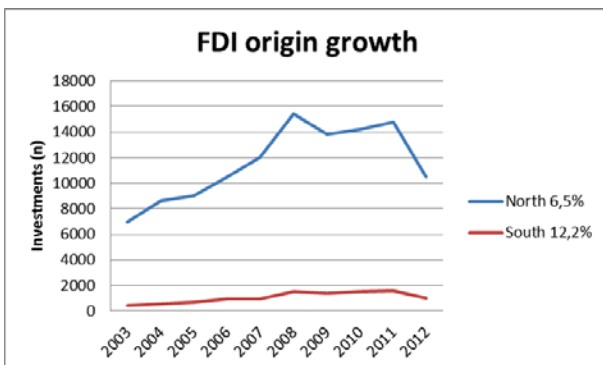


**Chart 1: Percentage of total FDI with the North & South as origins and destinations**

Of the FDI (8%) that originated in the South, 3% had the North as its destination, and 5% the South. Of the FDI (92%) that originated in the North, 60% remained in the North and 31% had the South as its destination.

Even though 8% of FDI investments originated in the South, that is still a relatively small amount. However, its growth rate (12%) is double the growth rate of the investments originating in the North (6%) (See Chart 2).

Concerning destination, the North was the destination for 64% of the total number of FDI investments, and the South for 36%. The growth rate for FDI investments destination the South was about 4%, about half the growth rate of the FDI investments destination the North (8.8%).



**Chart 2: FDI growth: North & South Origin and Destination**

To sum up, all FDI investments with origins in the South show the highest growth rates; moreover, they even continued to grow after the 2008 economic crisis.

## 4.1.2 World Regions

### 4.1.2.1 Investments destination: North

The North was the destination for 64% of investments from the world, of which 94.5% of the investments originated in the North and 5.5% in the South.

Western Europe, the origin for 45% of the investments, was the biggest investor in the North, as well as the biggest destination (36%). The next biggest origin and destination was North America, the origin for 38% of the investments and destination for about 30% (see Chart 3).

The best performing region attracting FDI from the world, in terms of number of investments and growth rates, is North America, followed by Western Europe, with third place being shared by the Middle East and the Asia Pacific, and last is the Rest of Europe.

Western Europe was the biggest destination for investments from the South, receiving 43% of the investments, followed by the Asia Pacific (Australia & New Zealand) and North America, both of which destinations for about 20%, with the Rest of Europe getting around 12%. Western Europe and North America ranked equally as the best regions attracting FDI from the South (See Chart 4).

The region most severely affected by the 2008 economic crisis appears to be Western Europe (see Chart 5). The FDI investments from the South do not seem to have been badly affected by the 2008 crisis, although there is a big drop in investments going to Western Europe around 2010 and to North America in 2011 (see Chart 5).

World Region Origin	Africa	Asia Pacific	Latin America	Middle East	North America	Rest of Europe	West Europe	% of Total FDI
Western Europe	0.0	4.6	0.1	0.2	7.9	13.4	18.7	<b>44.9</b>
North America	0.0	4.4	0.2	0.2	18.7	2.8	11.8	<b>38.2</b>
Asia Pacific	0.0	2.5	0.0	0.1	2.9	1.4	4.0	<b>11.0</b>
Rest of Europe	0.0	0.1	0.0	0.0	0.2	2.3	0.7	<b>3.3</b>
ME	0.0	0.2	0.0	0.1	0.2	0.3	0.5	<b>1.4</b>
LA	0.0	0.1	0.0	0.0	0.3	0.1	0.4	<b>0.9</b>
Africa	0.0	0.0	0.0	0.0	0.0	0.0	0.1	<b>0.3</b>
<b>% of Total FDI</b>	<b>0.1</b>	<b>12.1</b>	<b>0.3</b>	<b>0.7</b>	<b>30.4</b>	<b>20.2</b>	<b>36.3</b>	<b>100.0</b>

**Chart 3: Percentage of total FDI: Origin all world regions Destination North**

World Region	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	% of Total FDI
Western Europe	1.46	2.09	2.59	2.76	4.08	6.44	6.21	7.81	6.14	3.29	42.86
North America	0.83	1.07	0.93	1.51	1.99	2.15	2.18	2.48	3.85	2.29	19.28
Middle East	0.09	0.09	0.39	0.25	0.30	0.51	0.46	0.35	0.65	0.30	3.41
Asia Pacific	1.11	1.16	1.07	1.65	1.88	2.83	2.71	2.59	2.97	2.83	20.78
Rest of Europe	1.04	0.95	1.60	1.30	0.97	1.53	1.41	1.60	1.32	0.83	12.56
Africa	0.05	0.21	0.09	0.02	0.05	0.16	0.07	0.05	0.05	0.00	0.74
Latin America	0.02	0.00	0.00	0.07	0.05	0.05	0.02	0.09	0.07	0.00	0.37
<b>Total %</b>	<b>4.61</b>	<b>5.56</b>	<b>6.67</b>	<b>7.55</b>	<b>9.31</b>	<b>13.67</b>	<b>13.07</b>	<b>14.97</b>	<b>15.04</b>	<b>9.55</b>	<b>100.00</b>

**Chart 4: Percentage of total FDI: Origin South Destination North**

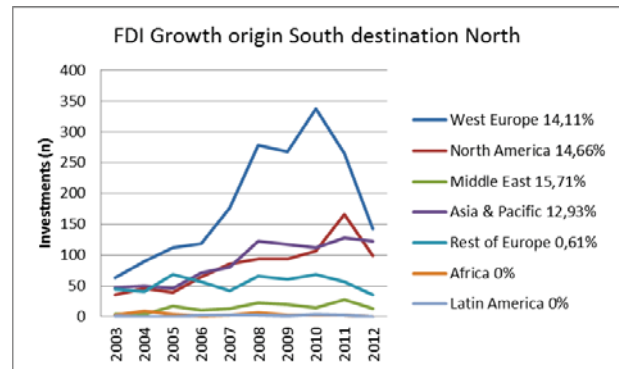
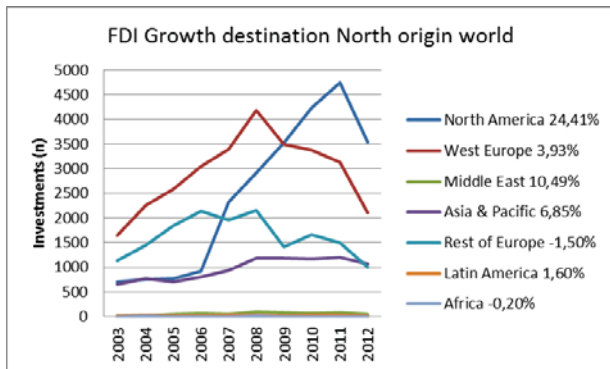


Chart 5: FDI growth: Destination North

#### 4.1.2.2 Investments destination: South

The number of investments the South received from the world were 36%, of which 86% originated in the North and 14% originated in the South.

Western Europe, the origin for 37% of investments, was the biggest investor in the South, followed by North America (28.7%), and the Asia Pacific (23.8%). Other world regions together represented about 10% of investments in the South.

The Asia Pacific region was the destination of more than half of the investments from the world as a whole (56%), followed by Latin America with almost 20%, and Africa and the Middle East each with around 11% (See Chart 6).

From the FDI investments the North was responsible for, the figures are quite similar: the Asia Pacific received almost 60%, followed by Latin America (20%), and the Middle East and Africa each receiving (9%) (See Chart 7).

The investments that originated in the South were distributed more evenly amongst the world regions: the Asia Pacific received 31%, Africa 25%, the Middle East 22%, Latin America almost 20% and the Rest of Europe less than 1% (See Chart 8).

The best performing regions attracting FDI from the world were the Middle East, and Africa, Latin America and the Asia Pacific. For regions attracting FDI from the North, the rankings are quite similar, but the least attractive world region appeared to be Africa. However, for the FDI investments originating in the South, the region attracting the most investment was Africa, followed by the Middle East and the Asia Pacific; the least attractive regions were Latin America and the Rest of Europe.

For investments originating in the world and the North, the Asia Pacific appeared to be the most severely affected by the 2008 economic crisis, with investments dropping to the 2003 level, and it was the only region in the South reporting almost 0% growth. FDI Investments originating in the South seemed temporally affected by the 2008 crisis, but in general they grew. There were, however, large falls in investments for all regions at the end of the period; the most stable growth was for the FDI destination Latin America (See Chart 9).

<b>World Region</b>	Africa	Asia Pacific	LA	ME	Rest of Europe	<b>FDI Origin Total %</b>
Western Europe	4.8	19.0	7.7	4.3	1.2	<b>37.0</b>
North America	1.9	16.5	7.3	2.6	0.4	<b>28.7</b>
Asia Pacific	1.8	17.8	2.2	1.9	0.2	<b>23.8</b>
Middle East	1.0	1.4	0.2	1.8	0.1	<b>4.4</b>
Latin America	0.1	0.3	2.0	0.1	0.0	<b>2.5</b>
Africa	1.5	0.1	0.1	0.2	0.0	<b>1.9</b>
Rest of Europe	0.3	0.9	0.2	0.2	0.0	<b>1.6</b>
<b>FDI Destination Total %</b>	<b>11.3</b>	<b>56.1</b>	<b>19.6</b>	<b>11.2</b>	<b>1.9</b>	<b>100.0</b>

**Chart 6: Percentage of total FDI: Origin all world regions, Destination South**

<b>World Region</b>	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	<b>FDI Destination Total %</b>
Middle East	0.43	0.49	0.68	0.83	0.86	1.51	1.47	1.11	1.15	0.79	<b>9.33</b>
Asia Pacific	4.81	6.21	5.49	6.54	6.08	7.92	6.12	6.14	6.35	4.34	<b>59.99</b>
Latin America	1.58	1.64	1.29	1.36	1.63	2.55	2.58	2.33	2.92	1.70	<b>19.58</b>
Rest of Europe	0.11	0.12	0.11	0.17	0.20	0.33	0.29	0.26	0.24	0.20	<b>2.04</b>
Africa	0.55	0.51	0.81	0.76	0.74	1.41	1.22	1.05	1.30	0.72	<b>9.06</b>
<b>Total %</b>	<b>7.48</b>	<b>8.96</b>	<b>8.38</b>	<b>9.66</b>	<b>9.50</b>	<b>13.72</b>	<b>11.69</b>	<b>10.89</b>	<b>11.97</b>	<b>7.75</b>	<b>100.00</b>

**Chart 7: Percentage of total FDI: Origin North, Destination South**

<b>World Region</b>	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	<b>FDI Destination Total %</b>
Africa	1.04	0.65	1.62	2.32	1.56	4.43	3.27	3.31	4.40	2.70	<b>25.30</b>
Middle East	0.66	1.06	1.61	2.62	1.72	3.33	2.45	2.97	3.36	2.79	<b>22.56</b>
Asia Pacific	1.61	1.96	2.22	3.42	2.95	4.73	4.21	3.63	4.05	2.62	<b>31.41</b>
Rest of Europe	0.03	0.06	0.05	0.13	0.05	0.06	0.06	0.13	0.13	0.16	<b>0.85</b>
Latin America	0.73	1.06	0.80	1.33	2.73	2.52	3.08	3.30	3.28	1.06	<b>19.88</b>
<b>Total %</b>	<b>4.07</b>	<b>4.78</b>	<b>6.31</b>	<b>9.81</b>	<b>9.01</b>	<b>15.08</b>	<b>13.06</b>	<b>13.33</b>	<b>15.22</b>	<b>9.32</b>	<b>100.00</b>

**Chart 8: Percentage of total FDI: Origin South, Destination South**

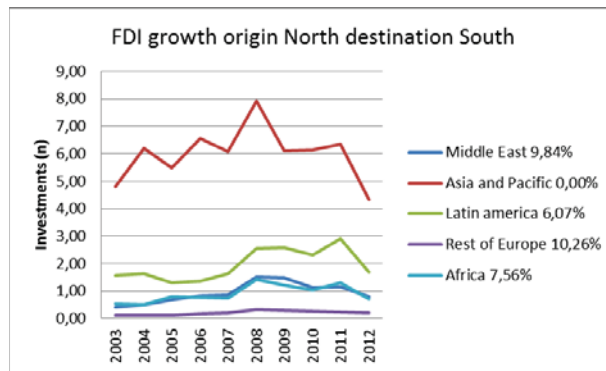
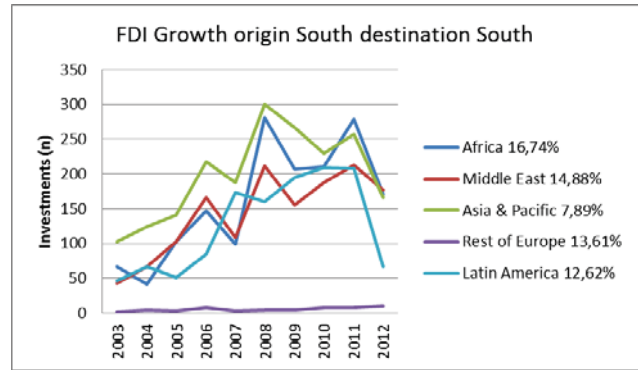
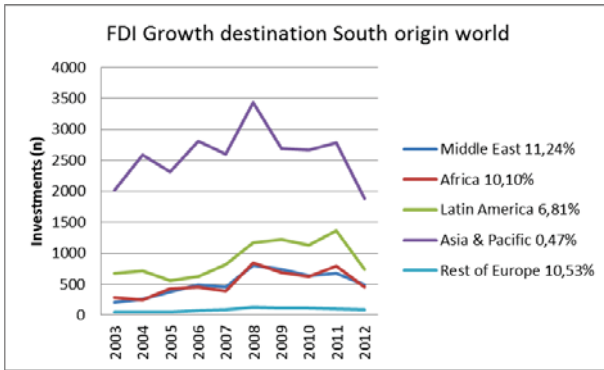


Chart 9: FDI Growth: Destination South

## 4.2 Industrial Sectors and Economic Activities

In the fDiMarkets database the investments are classified into 39 industrial sectors and 18 economic activities. Sectors and activities were ranked firstly according to volume, then according to their growth rate, and finally according to a total ranking that is an average of the two rankings. The 5 best and worst performing sectors and activities were chosen from the total ranking list for my analysis.

### 4.2.1 Analysis by Destination

In general, it was possible to observe that the faster-growing and stronger sectors were Business and Financial Services, followed at a distance by Textiles and Transportation. The strongest activities common to all destination regions were: Business Services, & Sales, and Marketing & Support (See charts 10 & 11).

Global sectors in decline appeared to be: Leisure & Entertainment, which shrank by 2/3 during the 10-year period. Wood Products ranked last in all regions, along with Warehousing & Storage. The weakest performing activities appeared to be: Extraction, which exhibited a dramatic fall, and Research & Development, investments for which halved during the period, Technical Support and Shared Service Centre.

### Destination: North and South combined

126,501 investments, total growth rate 7%.

Sectors that grew and became stronger were: Business Services, Financial Services, Textiles, Industrial Machinery, Equipment & Tools and Transportation. The amount of investments in Business and Financial services has almost tripled since 2003, while the others utmost doubled.

The strongest activities were: Business Services, Sales, Marketing & Support, ICT & Internet Infrastructure, Headquarters and Manufacturing. Manufacturing remains one of the strongest activities despite its negative growth, because it has by far more investments than any other activity. Business Services, Sales, Marketing & Support and Manufacturing attract 5 or 6 times more investments than Headquarters or ICT & Internet Infrastructure activities.

The weakest industry sectors appeared to be: Semiconductors, Warehousing & Storage, Minerals, Leisure & Entertainment, and Wood Products. The majority of these seem to have declined steadily since the beginning of the 10-year period. The weakest activities were: Construction, Research & Development, Technical Support Centre, Extraction, and Shared Services Centre. Construction activity appears to have been particularly affected by the 2008 economic crisis.

### **Destination: North**

80,498 investments, total growth rate 9%.

Sectors that grew and became stronger were similar to the sectors for North and South combined; however particular to the North was the growth rate of the Software & Services sector and the contraction of the Building & Construction sector since the beginning of the 2008 economic crisis.

Business Services and Sales, Marketing & Support activities both grew about three times bigger than the rest of the activities, and have presented almost identical growth rates patterns since 2009. However, from 2011 onwards both activities seem to have experienced a significant drop.

As for the weakest activities, Construction grew then felt dramatically around 2008; Research & Development seems to have been affected since 2006 and has shrunk steadily since.

### **Destination: South**

46,003 investments, total growth rate 4%.

Sectors that grew and became stronger were the same five as for the North and South combined, but with different growth rates and volumes. However, the Financial Services sector appeared to be especially negatively affected by the 2008 economic crisis.

The weakest industry sectors were almost the same five as those for the North and South combined, except for Paper, Printing & Packaging, that is now included within the five. Most of these sectors appeared unstable and had feeble growth for the whole 10-year period. Wood Products is clearly in decline.

Strong activities particular to the South were Retail and Education & Training activities. Manufacturing, Sales, Marketing & Support and Business Services were resilient despite the 2008 economic crisis, but experience a drop in 2011-2012. The drop can be partially explained as result of the incomplete data for the year 2012.

Three of the weakest activities are the same as for previous destinations; another weak activity for the South was Extraction and Technical Support activities. Extraction has shrunk since 2003; it has gone from 238 investments to just 8. Research & Development seems to have been in decline since 2006 and halved during the period.

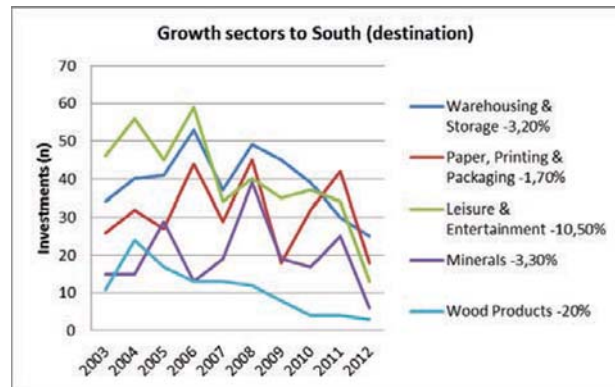
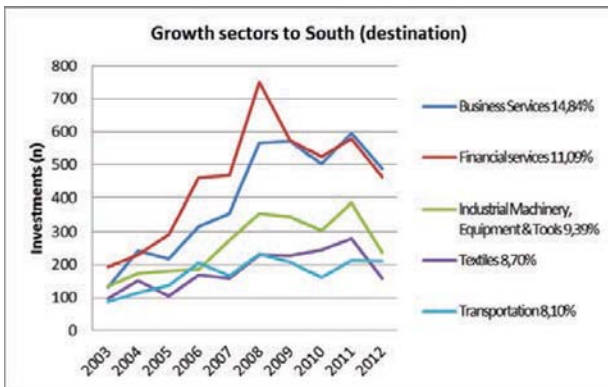
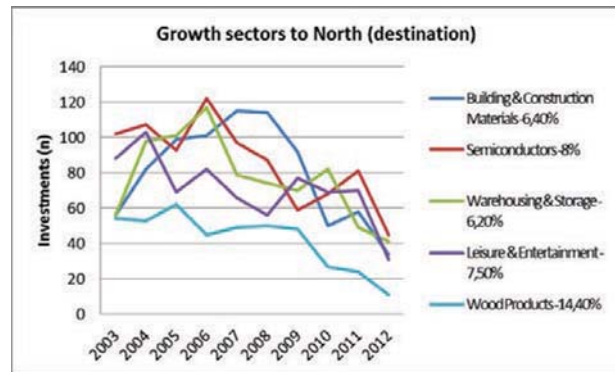
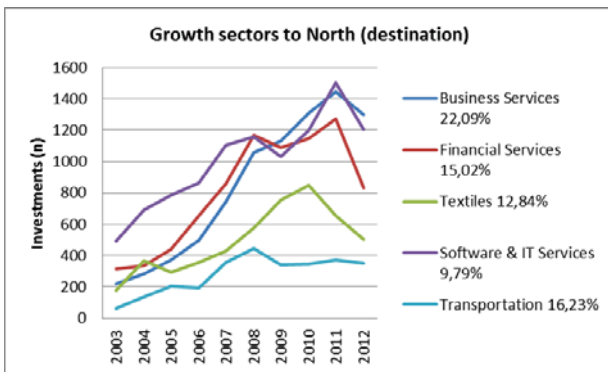
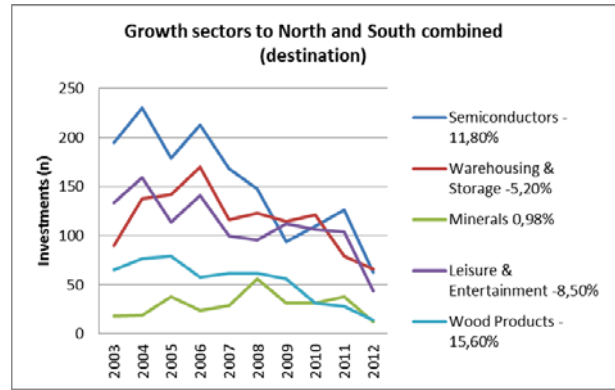
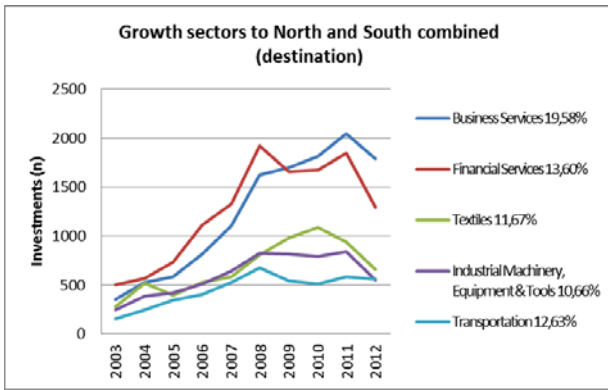
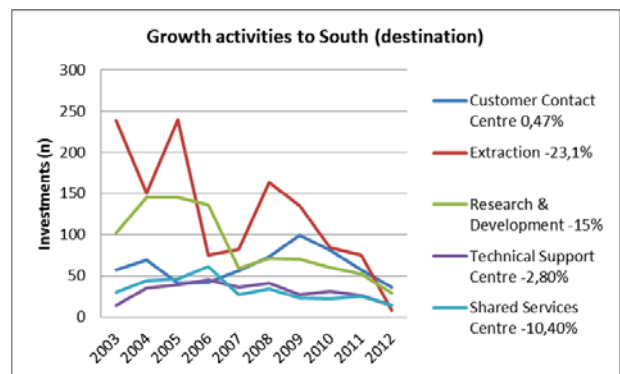
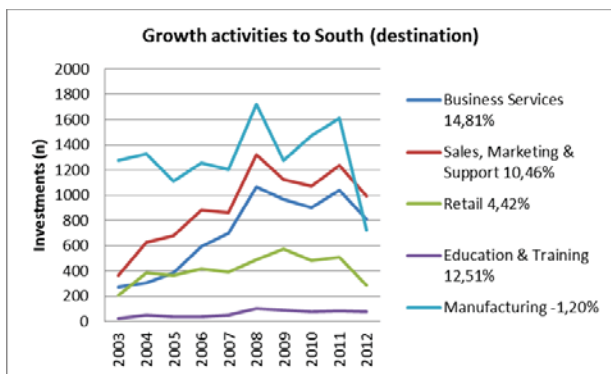
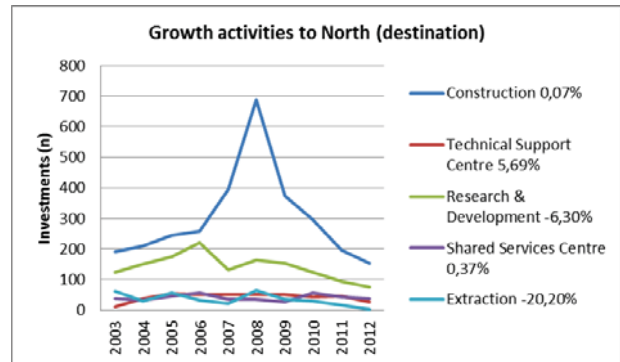
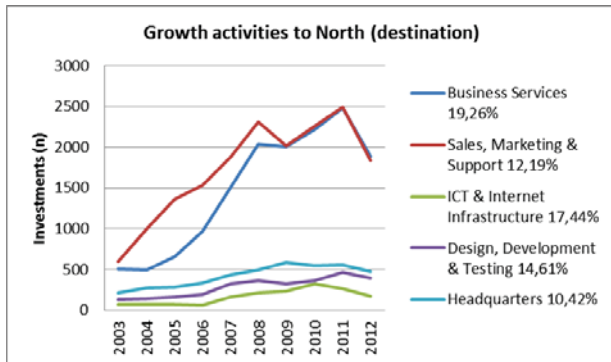
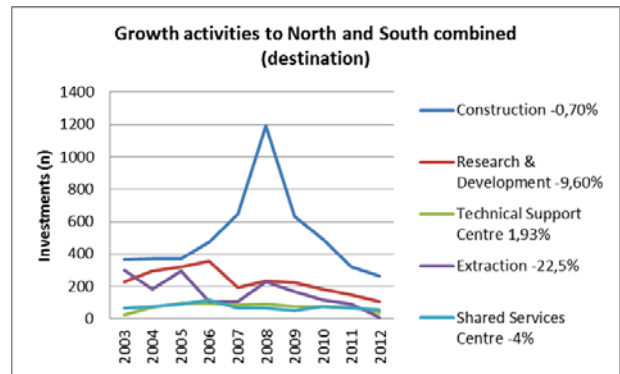
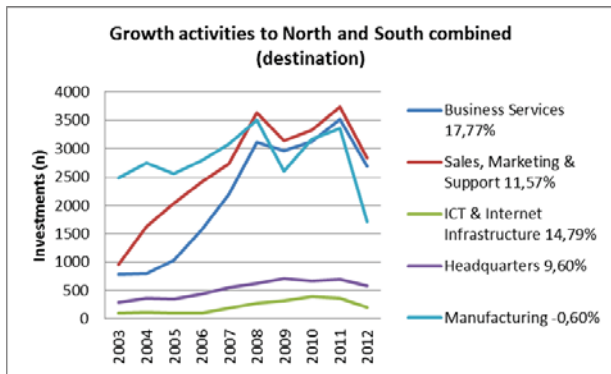


Chart 10: FDI growth: for top & declining industrial sectors



**Chart 11: FDI growth: for top & declining economic activities**



## 4.2.2 Analysis by Origin

Business Services Is the strongest industrial sector across all regions. Its volume doubled during the period, and its growth rate appeared unaffected by the 2008 economic crisis (See Chart12).

### **From North to North and South Combined**

115,846 investments, total growth rate 6.5 %.

The strongest sectors were: Business Services, Financial Services, Textiles, Industrial Machinery, Equipment & Tools and Transportation. The strongest activities were: Business Services, Sales, Marketing & Support, ICT & Internet Infrastructure, Headquarters and Manufacturing.

The 2008 economic crisis seemed to affect especially the Financial Services, Industrial Machinery, Equipment & Tools and Transportation sectors as well as causing a slowdown in the growth of Sales, Marketing & Support and Manufacturing activities.

The sectors that declined were: Leisure & Entertainment, which had been falling since 2004; Warehousing falling since 2006 and Building & Construction, which had been falling since the economic crisis in 2008. The Minerals and Wood Products sectors, as well as Research & Development and Extraction activities, appear to have been falling since 2003.

### **From North to South**

39,664 investments, total growth rate 2.8%.

The strongest sector were the same as those for North and South combined, but from North to South Financial Services appears to have been severely affected by the 2008 economic crisis.

As for activities, Manufacturing, Education & Training and Design, Development & Testing activities experienced a slowdown in 2008, after which they recovered and became strong. Manufacturing dropped dramatically in 2011.

Leisure & Entertainment and the Wood Products sectors, as well as Extraction and Research & Development activities shrank during the whole period.

### **From South to North and South Combined**

10,655 investments, total growth rate 12.2%.

Common across the investments originating from the South were, the strength of Business and Financial Services. Financial Services, which tripled in the number of investments and held up despite the 2008 economic crisis. Similar trends were seen with Business Services and Sales, and Marketing & Support activities.

For the worst performing sectors, my observation is that given their low volume, no reliable conclusions can be drawn.

### **From South to North**

4,316 investments, total growth rate 11.8 %.

Financial Services has been the biggest sector despite the 2008 economic crisis, followed by Business Services, which has nearly tripled in volume of investments.

Other sectors: Electronic Components, Industrial Machinery, Equipment & Tools, and Metals, doubled during the same period. However, their volume remained quite small. The Building & Construction Materials sector has been in free fall since 2006, with a slight improvement in 2011.

The biggest activities were: Sales, Marketing & Support and Business Services. However, the highest growth rate and number one performer in attracting investments has been Headquarters, which maintained its volume, despite a small drop around 2009.

### **From South to South**

With 6,339 investments, total growth rate 12.53 %.

Investments to Financial Services doubled and it is, by far, the biggest sector in the South. In addition, its growth rate is the best, compared to other regions. Business Services, Textiles, Healthcare and Consumer Products grew steadily. The Transportation sector maintained its level of attracting investments despite a 3-year setback. The Healthcare sector has had the highest growth rate (40%) across the top sectors in all regions.

As for activities, Manufacturing and Construction were the most affected by the 2008 crisis. However, Manufacturing had a positive growth rate of 3.3% (in the North the same sector has experienced negative growth), and its volume ended at same level as in 2003. Construction, however, continues to slow down.

Headquarters grew steadily, while Extraction appeared to be in decline.

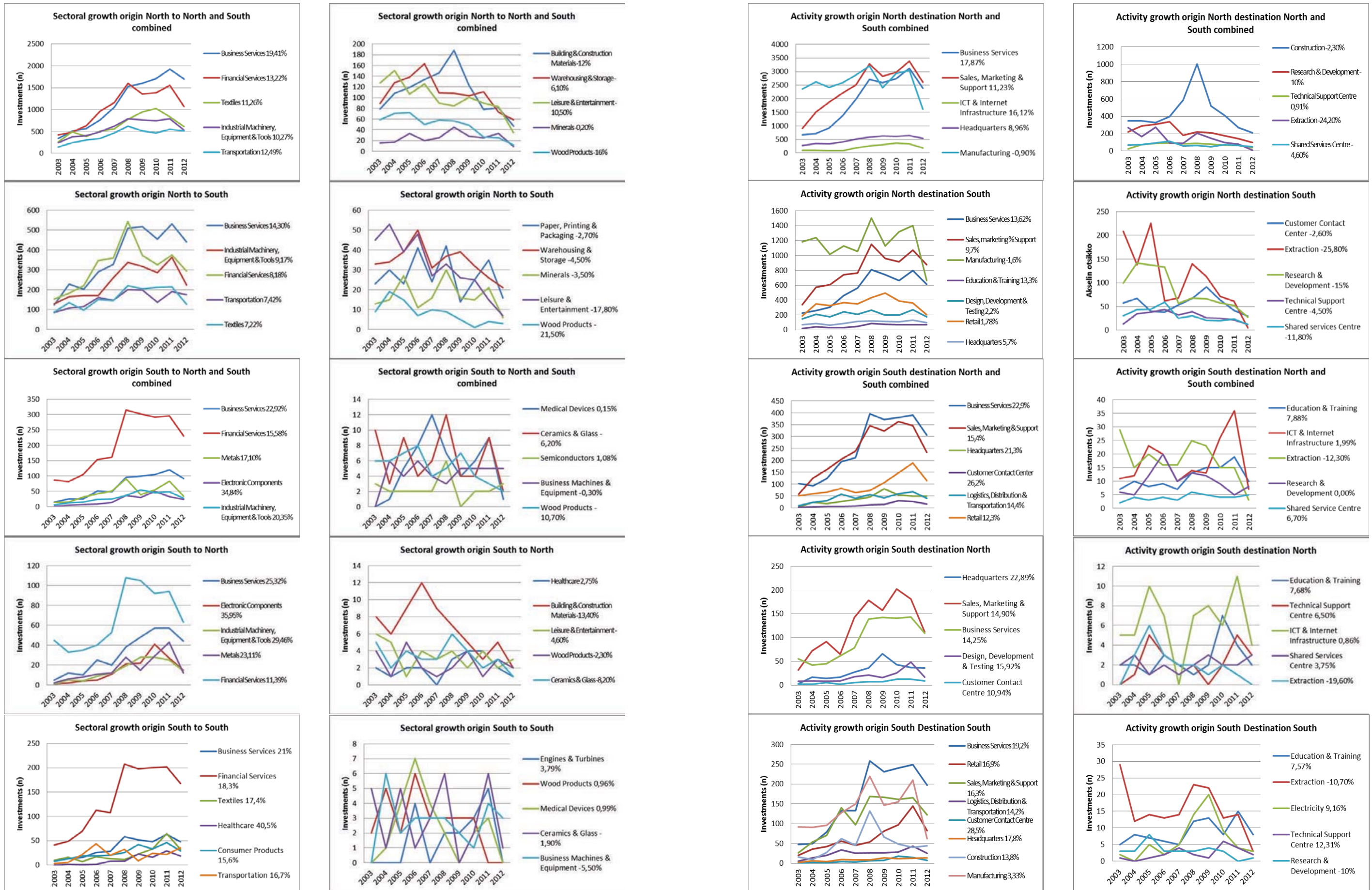


Chart 12: FDI growth: for top and declining industrial sectors & economic activities

## 4.3 The Networks

The previous analysis of investment growth showed that the South matters. The highest investment growth rates were found to originate from the South with the South or North as the destination. The analysis will now concentrate on the network structures resulting from these flows.

To answer the question of hierarchy and position of countries attracting FDI, two networks of FDI flows were visualized using UCINET. The networks show the total of the 10-year FDI transactions that occurred. Countries with less than 20 transactions were excluded.

In the network diagrams, countries are connected by FDI flows, i.e. transactions between multinational companies. The thickness of the ties varies according to the number of investments between countries. The size of the country nodes varies according to the number of FDI transactions the country is attracting (blue nodes) or the number of transactions of which the country is the origin (red nodes). The size of the nodes represents the in-degree and/or out-degree strength of countries and their hierarchy in the network.

Country geo-coordinates were added to Netdraw to reveal the structure of country linkages and its geographical distribution.

### 4.3.1 South-South

The dataset analysed for the South-South network contains 6,339 investments (See Figure 6).

#### 4.3.1.1 Structure and Geographical Distribution

The South-South network involves 58 countries; some country nodes appear twice, because they are FDI destinations as well as origins.

Of the 53 African countries in the fDi markets database, 21 are FDI destinations and 6 are origins. That means that 41% of the countries in the region are included in the network.

Of the 32 Asia Pacific countries in fDi markets database, 14 are FDI destinations and 9 are origins. That means that 43% of the countries in the region are included in the network.

Of the 12 Middle East countries in fDi markets database, 10 are FDI destinations and 7 are origins. That means that 83% of the countries in the region are included in the network.

Of the 29 Latin American countries in fDi markets database, 12 are FDI destinations and 6 origins. That means that 41% of the countries in the region are included in the network.

Figure 6 shows the spatial distribution of the nodes according to the countries geo-coordinates. It is important to note that for those countries that are FDI a destination as well as a source the nodes appear to be overlapping.

In general the network shows a strong hierarchical pattern, dominated by India and the UAE and to a lesser extent China. India and the UAE are at the top of the hierarchy because of their strong outdegree power, i.e. they are the biggest origins of FDI in the network. China has the strongest indegree power, attracting more FDI but it is a weaker origin of investments than India and UAE.

The strongest ties appear between India and the UAE in both directions, but the tie having the UAE as destination is thicker. Next in strength are the ties from India and Malaysia to China as destination.

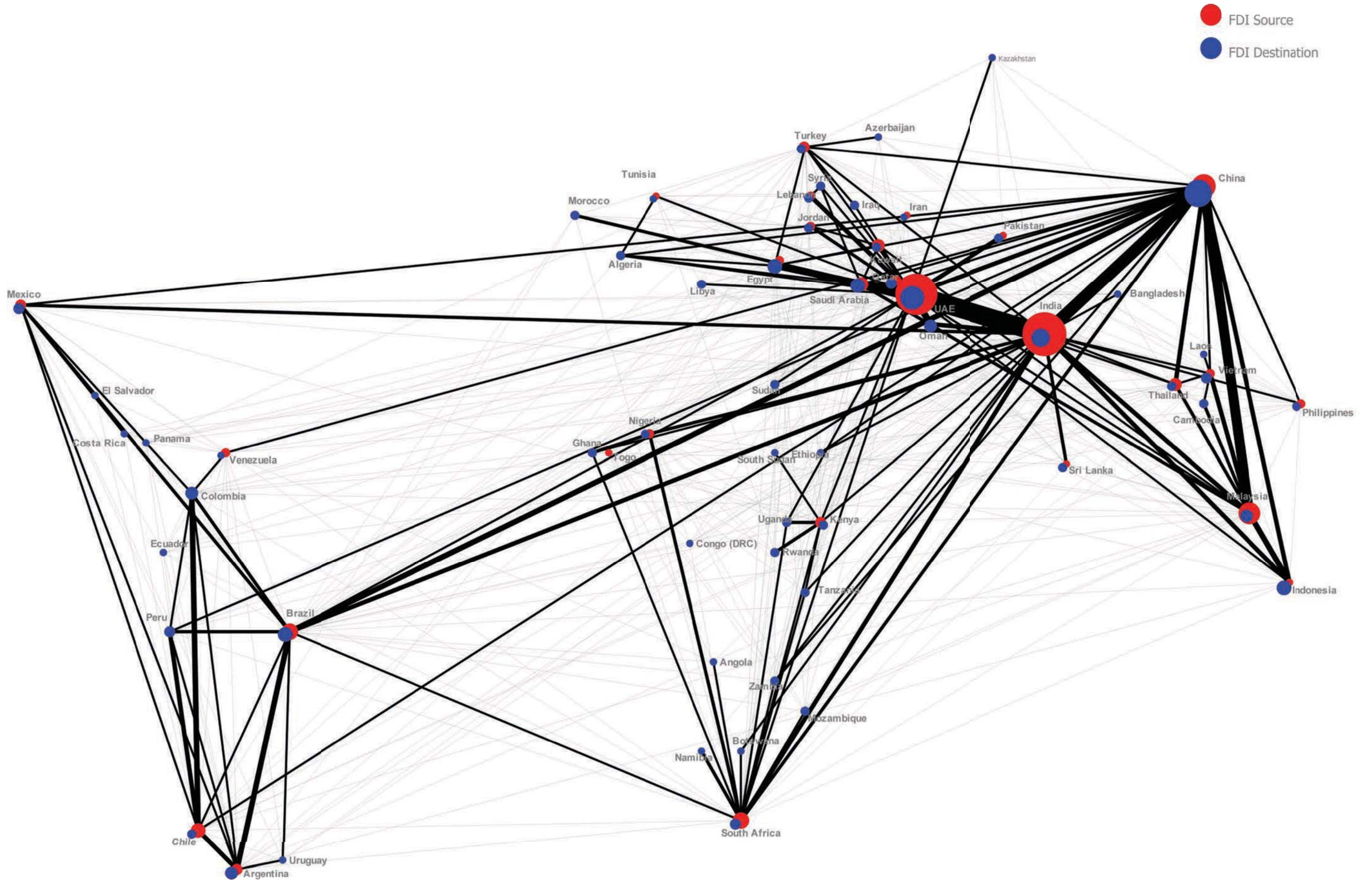
Ties within Africa shows a hierarchical pattern which is strongly dominated by South Africa, and to a lesser extent, by Egypt. In general, however African countries appear disconnected amongst themselves. South Africa is the core country of the region with stronger outdegree power and strong ties with most of Africa and other world region core countries. Egypt has strong links with neighbouring countries and the Middle East.

The Middle East is also quite hierarchical within itself, with the UAE having the greatest power. The Middle East appears evenly connected to Africa, having out degree ties with all 21 African destination nodes.

There are also heterarchical components in the South-South network around the axis created by the core countries; the UAE and India form a large layered geographic area with strong ties and well developed indegree and outdegree nodes from the Middle East, the Asia Pacific and North Africa.

Latin America also shows a heterarchical pattern, the country nodes are evenly and strongly connected amongst themselves. Brazil is the core country of this region, having stronger outdegree power than any other country in Latin America as well as stronger ties within Latin America, and to the Asia Pacific and South Africa. However, Latin America itself is the least connected region in the South-South network, reasonably connected with the Asia Pacific, but having weaker and fewer ties with the Middle East and with Africa.

Figure 6: FDI Network: Origin South Destination South



### 4.3.1.2 Main Industrial Sectors

Based on the growth analysis presented in section 4.2 the top 5 industrial sectors for FDI (origin South destination South) are: Financial Services, Business Services, Consumer Products, Textiles and Healthcare. To visualise the distribution of the destination countries in these sectors, Ucinet was used (See Figure 7: FDI: Destinations in main industrial sectors).

According to the number of ties and the size of nodes in the network, the Middle East and the Asia Pacific are the strongest and most active regions attracting investments in these sectors.

Financial Services is the biggest sector and has the largest number of its investments in the UAE, China, Malaysia and Egypt. The sector seems strong across the South, especially throughout the Middle East and the Asia Pacific but its strength declines towards West Africa and Latin America. The same pattern seems present for the rest of the sectors.

Healthcare, which is the sector with the biggest growth rate (40%) worldwide, has as its main destinations India, the UAE and Oman, 5 more countries in the Asia Pacific, 6 countries in Africa, 3 in Latin America and 1 more in the Middle East.

To better understand the links behind the graphics, the profiles of the top companies investing in the sectors will be briefly described. (The following information is extracted from the fDiMarkets dataset and the companies' homepages.)

The top 5 companies were from the UAE, India and China; and in general had operations across the Middle East, Asia Pacific, North of Africa. The Financial Services sector consisted mostly of banks. In Business Services there were 2 call centres, 1 financial consultancy firm, 1 engineering/IT company and a news agency. In Consumer Products, there were 3 jewellery firms, 1 traditional medicine company and 1 home decoration company. In Textiles, there were franchise and retail firms. In Healthcare, there were private health centres and/or medical hubs for health tourism. The target market for the Textiles, Consumer Products and Healthcare sectors were the local middle or middle upper classes.

The following individual companies had the biggest number of investments in the different industrial sectors. The following information was extracted from the fDiMarkets dataset and the companies' homepages.

Financial services:

*Al Rajhi Bank*: Saudi Arabian; operating in Jordan, Kuwait and Malaysia.

*Bank of Baroda*: Indian, operating in 14 countries in Africa, the Middle East and the Asia Pacific.

*Ecobank Transnational*: a pan-African conglomerate, operating in 23 countries in Africa.

*Bank of India (BOI)*: operating in 9 countries in Africa, the Middle East and the Asia Pacific.

*UAE Exchange & Financial Services*: with an extensive network in the Middle East and Asia.

Business Services:

*Dezan Shira & Associates*: Chinese, provides services to foreign direct investors operating in mainland China, India, Vietnam, and Singapore; also has partnerships in Russia and Central Asia.

*Larsen & Toubro Limited*: India's largest engineering and construction company. It also provides engineering, construction, manufactured goods, information technology and financial services in Brazil, China and the UAE.

*Spanco*: Indian, providing expertise in BPO<sup>11</sup>, is a call centre operator and manpower outsourcer. It has operations in 6 African countries.

*Transactel*: Guatemalan, the largest Central American BPO provider.

*The Xinhua News Agency*: Chinese, a press agency that has transformed from a government cultural institution into an enterprise. It operates in 7 countries of the Asia Pacific and Latin America.

#### Consumer Products:

*Sodimac*: Chilean, home improvement warehouse store chain. Besides Chile, it also has stores in Argentina, Colombia and Peru.

*Dabur*: Indian, Ayurvedic medicine manufacturer, with product categories like hair care, oral care, health care, skin care, and home care & foods. The firm operates in Egypt, Kenya, South Africa and the UAE.

*Damas Jewelry*: the UAE's largest jewellery and watch retailer. It operates in 8 countries across Africa, the Middle East and the Asia Pacific.

*Joyalukkas*: Indian, jewellery group. The group has outlets across nine countries in the Middle East and the Asia Pacific.

*Malabar Gold*: Indian firm with activities in gold, diamonds and precious metals, real estate development, hospitality, advertisement & publicity services and charitable institutions. It operates in 4 countries of the Middle East.

#### Textiles:

*Max Retail*: the UAE's value-fashion brand, supplying the mid-market segment. It has over 226 stores across the Middle East, North Africa and India.

*MH Alshaya Co*: Kuwait's retail franchise operator. It manages 70 international brands and owns and operates over 2,500 outlets across the Middle East, North Africa, Russia, Turkey and Europe.

*Fawaz Alhokair Group*: Saudi Arabian, active in retail, real estate, construction, financial services, health care and the hospitality business sectors. It operates across the Middle East and North Africa.

*Falabella*: Chilean, a retail company, one of the largest in Latin America, working also in financial and pharmaceutical sectors. It also operates in Argentina, Colombia and Peru.

*AZADEA Group*: Lebanese, a retail franchise operator in clothing, accessories, food, multimedia, home furnishings and sports goods. It operates in the Middle East, North Africa and Romania.

#### Healthcare:

*Columbia Asia*: Malaysian, a hospital chain with medical facilities across India, Malaysia, Vietnam and Indonesia. The target market is the fast-growing middle income group. The company is expanding, with 14 hospitals under construction and property for another 12.

*Apollo Hospitals*: Indian, is a hospital chain and private healthcare provider in Asia with hospitals in India, Sri Lanka, Bangladesh, Ghana, Nigeria, Mauritius, Qatar, Oman and Kuwait. Other business sectors handled by this company are Insurance, Pharmacy and Life Style.

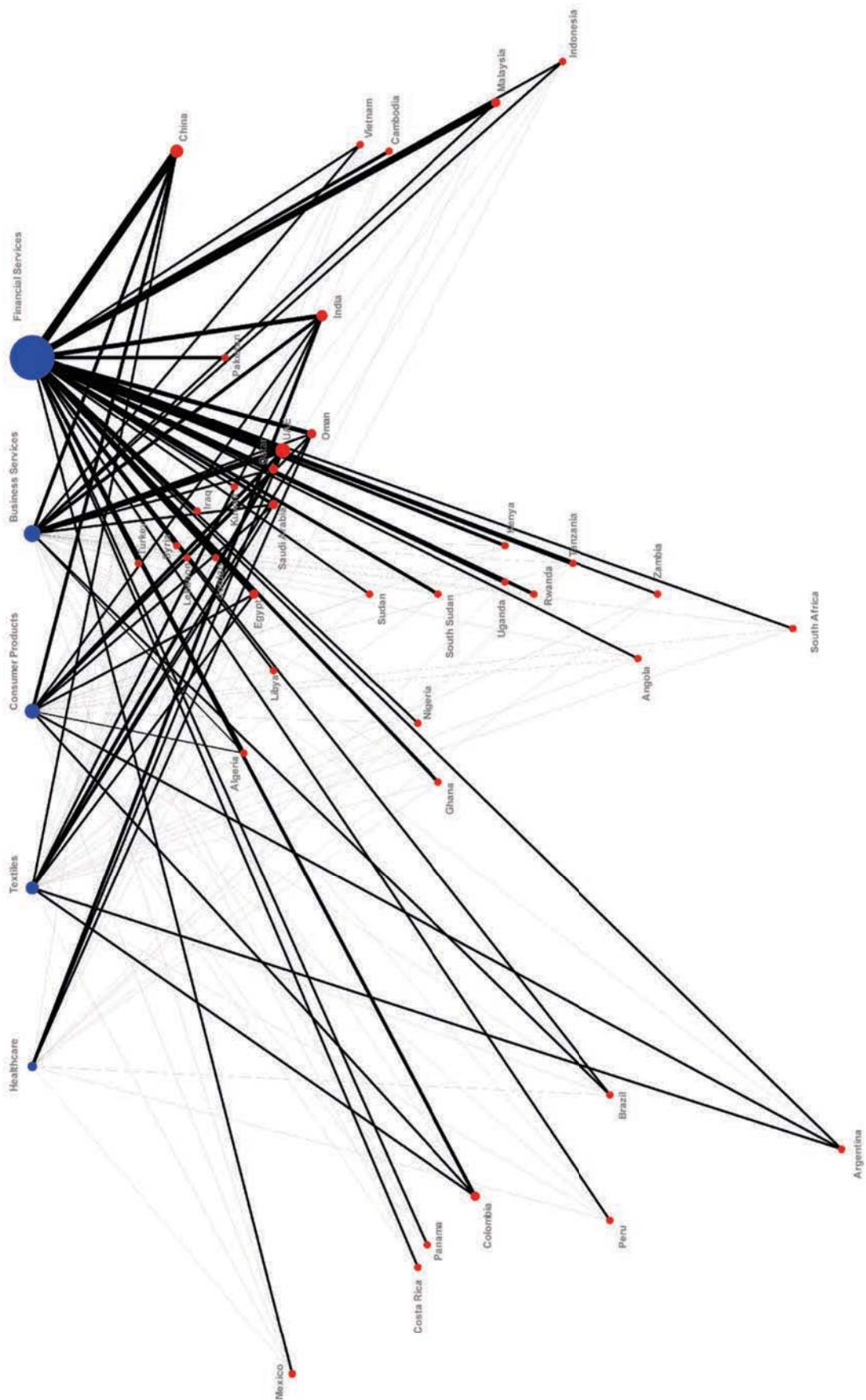
*DM Healthcare*: UAE's, provides healthcare at affordable cost across 5 countries in India and the Middle East, through 145 establishments.

*Shifa Al Jazeera Medical Group*: UAE's, is a healthcare provider in the Middle East.

---

<sup>11</sup> Business Process Outsourcing





**Figure 7: FDI: Destinations in main industrial sectors**

### 4.3.2 South-North Network

The dataset analysed for the South-North network contains 4,316 investments (See Figure 8).

Note that the countries were classified according to the Brandt-line and thus, some countries in Asia Pacific appear as belonging to the North and some as being part of the global South.

#### 4.3.2.1 Structure and Geographical Distribution

Figure 8 shows the spatial distribution of the South-North network, in which only countries with more than 20 investments are included. The result is that 20 countries from the South invest in 29 countries in the North.

It is clear that compared to the South-South network there are fewer southern countries making linkages to locations in the North that they did to locations in the South, but their ties are stronger. All the global South's regional core countries would participate in the South-North network.

The biggest investors are China and India followed by the UAE and Turkey. The main destinations of their investments are the United States and the United Kingdom, the ties with these countries being equally strong. Other important destinations are Germany and Russia; the latter country has strong ties with China and Turkey.

The United States and United Kingdom seem to be competing on equal terms as destinations. In the entire South-North network, two triangles dominate in the structure, both departing from India and China, and converging in either the United States or the United Kingdom.

It's important to note that the UAE, which was dominant in the South-South network, appears to be less significant in the South-North network.

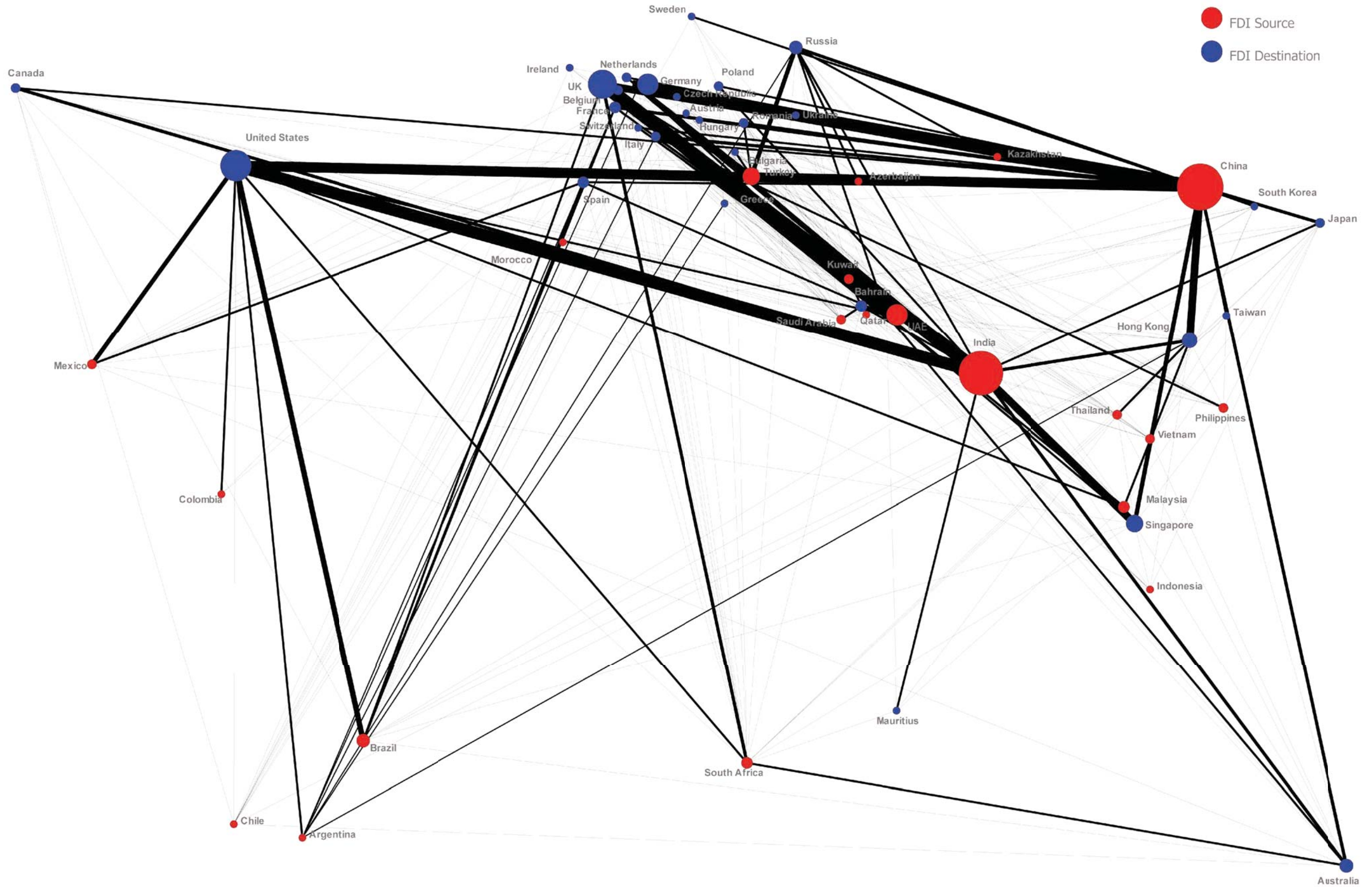
From Africa, only 2 countries invest in the North. The most important of these is South Africa, which has strong ties with the United States and United Kingdom, and numerous links with Western Europe. Morocco appears more locally connected in the Mediterranean, particularly with Spain and France.

Of the 5 Latin American countries in the network, the strongest node is Brazil, which has excellent ties to the United States, Spain, France and the United Kingdom. In general, the United States is an important FDI destination for all Latin American countries.

From the Asia Pacific, 9 countries invest in the North. In fact, the Asia Pacific is the most well-connected Southern region to the North in terms of number of ties and the strength of those ties.

From the Middle East, the UAE, Kuwait, Saudi Arabia, and Qatar invest in the North, especially in Western Europe.

Figure 8: FDI network: Origin South Destination North



### 4.3.2.2 Main Industrial Sectors and Economic Activities with Origin of Investments the global South

The main industrial sectors that the South is investing in, in the North are: Financial Services, Business Services, Metals, Electronic Components, Industrial Machinery and Equipment & Tools. The investors in main industrial sectors in the North are China and India. China invests mostly in the Financial Services, Electronic Components, Industrial Machinery and Equipment & Tools sectors. India invests strongly in Financial and Business Services as well as in Metals.

In general the Asia Pacific is the region from the global South with the strongest investment ties to industrial sectors in the North (more countries from this region invest in the North and they have a higher volume of investments in the North's main industrial sectors).

The main economic activities (See Figure 9) that the South invests in, in the North are: Sales, Marketing & Support, Business Services, Headquarters, Design, Development & Testing and Customer Contact Services. These economic activities appear as top 5 for all the countries studied when the individual countries' investment profiles are studied (See section 4.4 below). Additionally, Business Services, Sales, and Marketing & Support are always the strongest.

In the top companies listed by activity, we have observed that some companies keep appearing in three different activities: Sales, Marketing & Support, Headquarters and Design Development & Testing, which seem to be linked to each other.

Customer Contact Services seems to be in a category on its own. This activity includes outsourcing service companies, a specialised medical publication and an IT company.

The following individual companies had the biggest number of investments in the different economic activities. The following information was extracted from the fDiMarkets dataset and the companies' homepages.

Sales, Marketing & Support:

*Huawei Technologie*: Chinese multinational networking and telecommunications equipment and services company; it is also the largest telecommunications equipment maker in the world. In the North it invests in 15 Western Europe countries, 1 Asia Pacific country and 1 country in Rest of Europe.

*GAC Group*: Chinese automobile maker and holding company. In the North it invests in 4 Western Europe countries and 1 from the Asia Pacific.

*Emirates Airline*: the largest airline in the Middle East with businesses in aviation, travel, tourism and leisure industries; it is owned by the Governmental Investment Corporation. It invests in 3 Western Europe countries, the USA, 6 Asia Pacific countries and 1 country in Rest of Europe.

*DAMAC Properties*: the largest privately owned luxury real estate developer in the Middle East. It has investments in Ireland and the UK.

*Agility*: Kuwait's, provides freight transportation, warehousing and supply chain management services in challenging environments to businesses, governments, international institutions and relief agencies; it has 500 offices in 100 countries. It has investments in 5 Western Europe countries and 1 Asia Pacific country.

Business Services:

*State Bank of India (SBI)*: provides cross-border finance solutions; it has a network of 163 offices/branches in 33 countries. It invests in 11 countries in the North, 3 in the Asia Pacific, 2 in the Middle East, 1 in USA, and 5 in Western Europe.

*Industrial and Commercial Bank of China (ICBC)*: a state-owned commercial bank, the largest in the world. It has investments in 17 destination countries in the North.

*Bank of China*: a government owned bank, the 2<sup>nd</sup> largest lender in China and 5<sup>th</sup> largest in the world. It has investments in 17 destination countries in the North.

*Tata Consultancy Services (TCS)*: an Indian IT services, consulting and business solutions partner. It has investments in 8 countries in the North.

*iRemit*: is the largest non-bank Filipino-owned remittance company; it is known for having revolutionized the remittance industry by employing the latest IT technology and Internet platforms to cut down the remittance period to seconds. It invests in 8 destination countries in the North: 2 in Western Europe and 6 in the Asia Pacific.

#### Headquarters:

*Huawei Technologies*: Chinese, with headquarters investment projects in Canada, France, Germany, Hungary, Spain, the UK and the United States.

*Agility*: Kuwait's with headquarters investment projects in France, Hungary, Poland, Singapore, Slovenia, Switzerland and the United States.

*ZTE*: China's largest telecoms equipment company, with operations in 160 countries. It has headquarters investment projects in France, Germany, Singapore, the UK and the United States.

*Yingli Green Energy Holding Company Limited (Yingli)*: a Chinese solar panel manufacturer. It has headquarters investment projects in Australia, Japan, Switzerland, Singapore and the United States.

Three Chinese companies with the same number of headquarters investments are:

*Suntech Power Holdings*: a solar panels producer, with investments in Switzerland, the UK and the United States.

*Trina Solar Limited*: a solar panels producer, with investments in Singapore, Switzerland and the United States.

*VanceInfo Technologies*: an IT outsourcing company. It has investment projects in Australia and Hong Kong

#### Design, Development & Testing:

*Huawei Technologies*: Chinese, with investment projects in Sweden and Italy.

*Wipro Technologies*: Indian IT consulting and outsourcing company. It has investment projects in Australia, Canada, France, Germany, Hungary, the UK and the United States.

*Tata Consultancy Services (TCS)*: Indian, with investments in Bahrain, Israel, Japan, the Netherlands, Singapore and the United States.

*Mahindra Satyam (Satyam Computer Services)*: Indian IT services company. It has investment projects in Australia, Canada and Hungary.

Two Indian companies with the same number of investments are:

*HCL Technologies*: Technology and IT company, investing in Australia, Ireland Singapore and the United States.

*ZTE*: China, investing in France, Russia, Spain, Sweden, the UK and the United States.

#### Customer Contact Services:

*Firstsource (ICICI OneSource)*: Indian business process outsourcing services provider, investing projects in the UK.

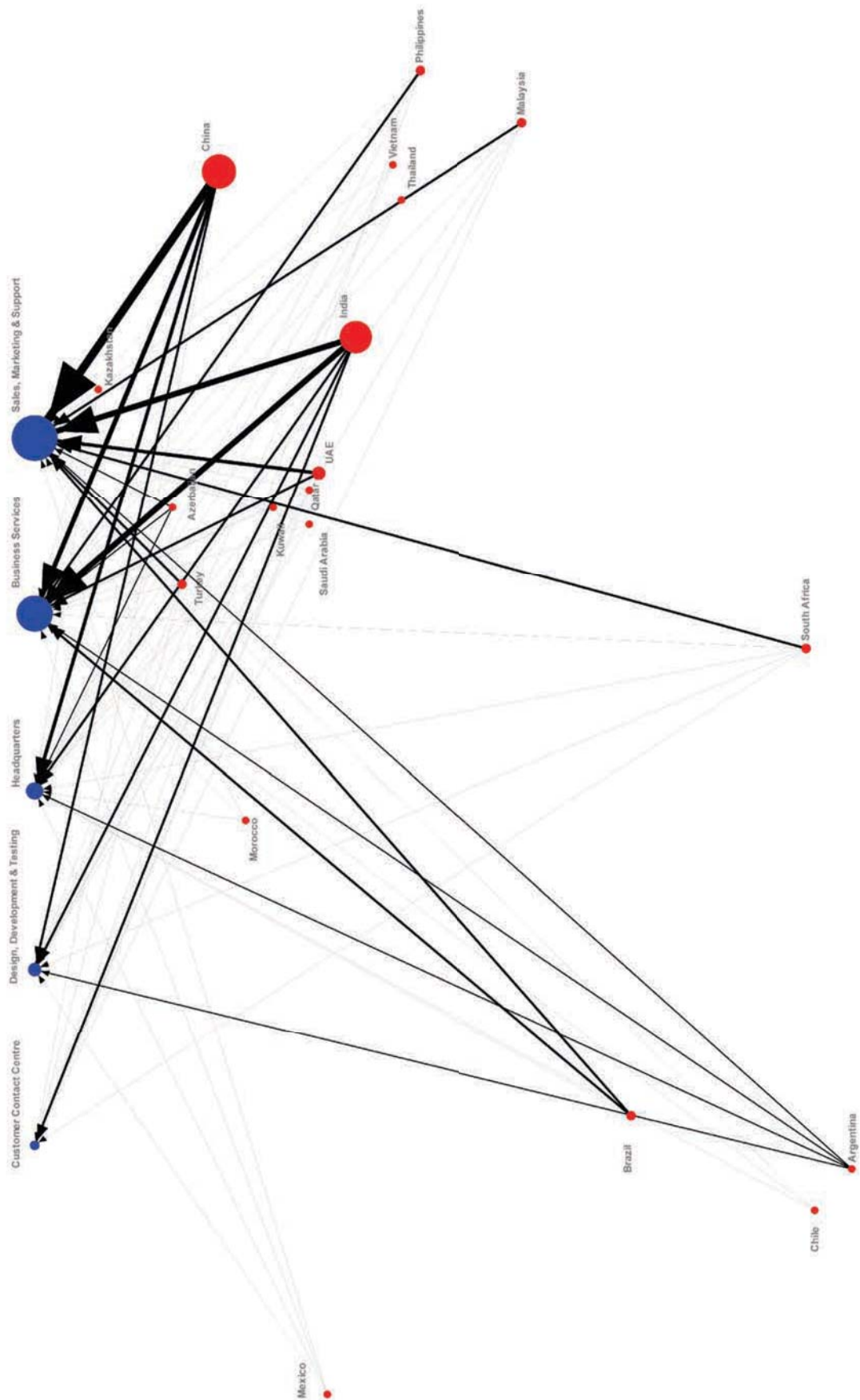
*Aditya Birla Minacs Worldwide*: Indian outsourcing business solutions company, investing in Canada and the United States.

*Aegis Communications (Aegis BPO)*: Global customer care BPO, with investments in the UK and the United States.

*HCL BPO*: Indian IT company investing in the UK.

*HEROtsa (Telecom Service Centres)*: Indian outsource solutions provider investing in the UK.

Figure 9: FDI origins for main economic activities



## 4.4 Top Countries & Their Competitors

To determine the rank of countries attracting FDI in the global South, the data for all FDI inflows in the South was analysed. There are 61 countries in the global South that have had more than 20 investments over the 10-year period. The first step was to calculate their ranking in FDI attraction (number of investments and growth of investments). The result was that Saudi Arabia was number one and China was not among the top 30. Presenting a result where China is not among the top countries attracting FDI would however be misleading, since China is the country receiving most of the FDI investments (27.9 %) going to the global South. Therefore I decided to present the top countries attracting FDI by number of investments. Figure 10 shows all FDI destinations with more than 1% of the total number of investments.

In the top category according to number of investments, (See annex 1) are China and India. It is interesting to observe that China was not among the top countries in the ranking by performance, since it had a negative growth rate of 3%. Nonetheless, China is the biggest destination country for FDI in the South, receiving about 27% of all the investments in the region. India, receives 13% of the total number of investments, also presents a relatively slow investment growth rate of 3%.

In the next category are the UAE, Brazil and Mexico, each receiving about 5% of total investments, with growth rates between 5-10%. These countries are also regional core countries.

The third category consists of countries that have gathered around 10% growth; they get around 1-2% of total investment each. The exception is Saudi Arabia, which has a faster investment growth rate (18%). In fact, Saudi Arabia ranks number one of all countries by performance attracting FDI. Thailand, Vietnam and Malaysia have bigger volumes of FDI in the category, but slower growth rates.

When considering the network of the total FDI investments going to the South (See Annex 2: Network: Total FDI Destination South), the countries in the global South with the highest nodes of inward investments are the same as those reporting low or negative FDI growth. That is because the majority of those countries inflows come from the North and the North is undergoing a recession. The countries affected can be seen in Figure 10. It is worth noting that, China and the Asia Pacific countries inflows are in general more North dependent, which explains why they are weaker now. In contrast, the Middle East countries, being less North dependent, reported the best performances in attracting FDI investments.

With regard to the investment portfolios for the economic activities, it appears that the 12 chosen countries are attracting most of their investments in just two activities: Business Services and Sales, and Marketing & Support.

To answer the question about the most important competitors in the region, core countries, regional core countries as well as important countries in the South-South network were identified, three for each world region. These were chosen according to the networks core-periphery analysis explained in section 4.2, as well as on the basis of the country rankings presented in this section.

For each of those 12 countries, 3 main competitors in the country's main 5 industrial sectors and activities were analysed. To identify the competitors, Manhattan Distance analyses were performed using UCINET. The analyses determined the countries whose economic activities and industrial sectors were most similar.

In general, according with their investment portfolios for industrial sectors, the 12 chosen countries appear attracting comparable amounts of investments in each of their 5 main sectors. China's portfolio being the best example of this. The UAE's industrial profile, on the other hand, seems

fundamentally specialized in Business Services and Financial Services, while India excels in attracting investments for Software & IT services.

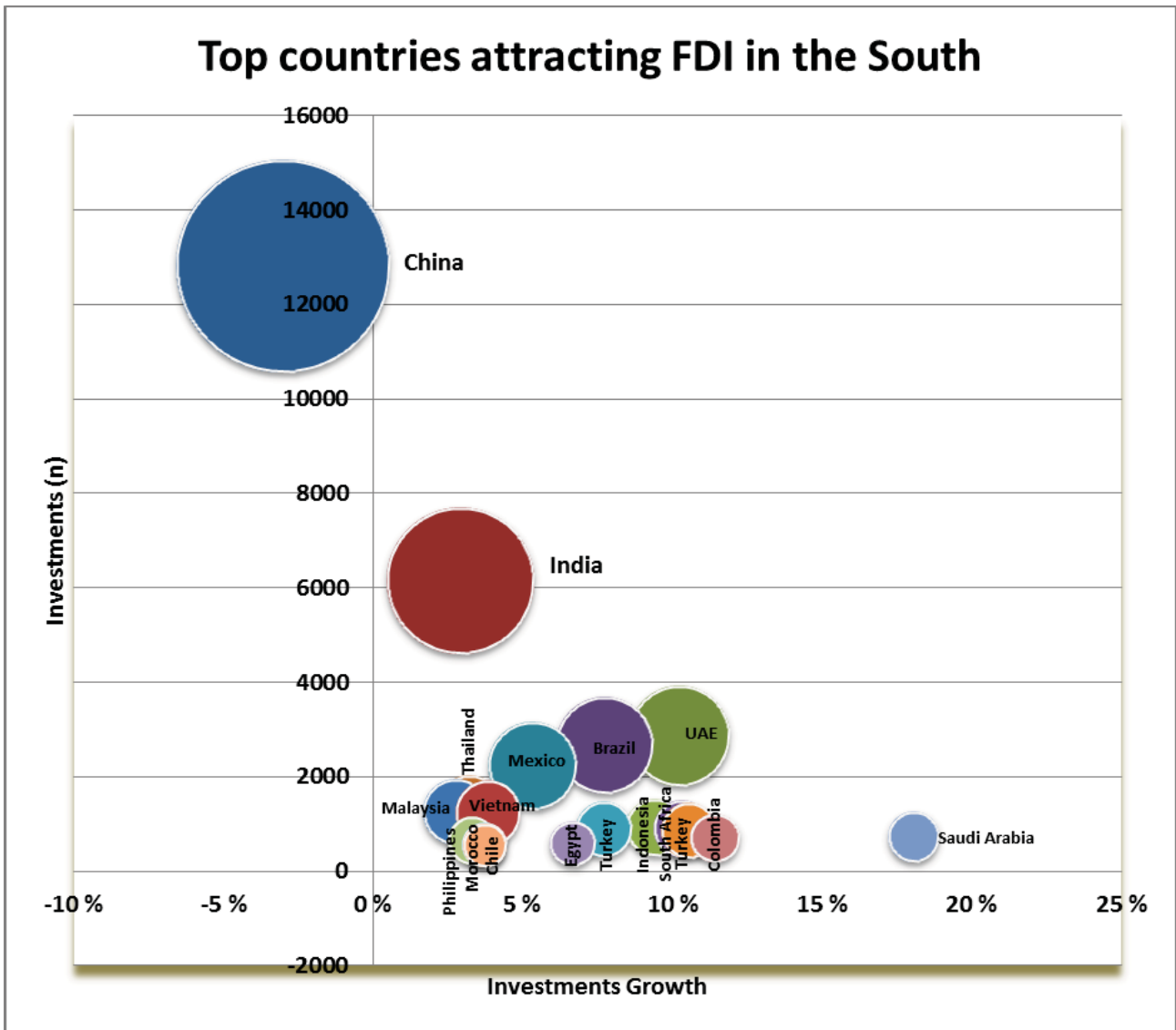


Figure 10: Top countries attracting FDI in the global South



## 4.4.1 The Asia Pacific

See Annex 3: Network, Total FDI Destination Asia Pacific

### 4.4.1.1 India

India ranks 15<sup>th</sup> in attraction of FDI in the global South.

Of all the FDI investments going to the South, India with 2.5% is the 9<sup>th</sup> largest investor and the 2<sup>nd</sup> biggest destination, getting about 13.36% of FDI.

India is also the second biggest investor in the North-South, origin for 25% of FDI investments.

In the South-South network, India is the biggest investor, origin for 17.76% of investments; and the 3<sup>rd</sup> most important destination, getting 5.68% of FDI investments. India is origin for 50 FDI destinations and attracts FDI from 18 countries.

India's main competitors for attracting FDI are the UAE, Brazil and Mexico:

The main sectors where they compete are: Business Services, Communications and Financial Services, Industrial Machinery, Equipment & Tools and Software & IT services. India excels in Software & IT services.

The main activities where they compete are: Business Services, Customer Contact Centre Design, Development & Testing, Headquarters Sales, and Marketing & Support.

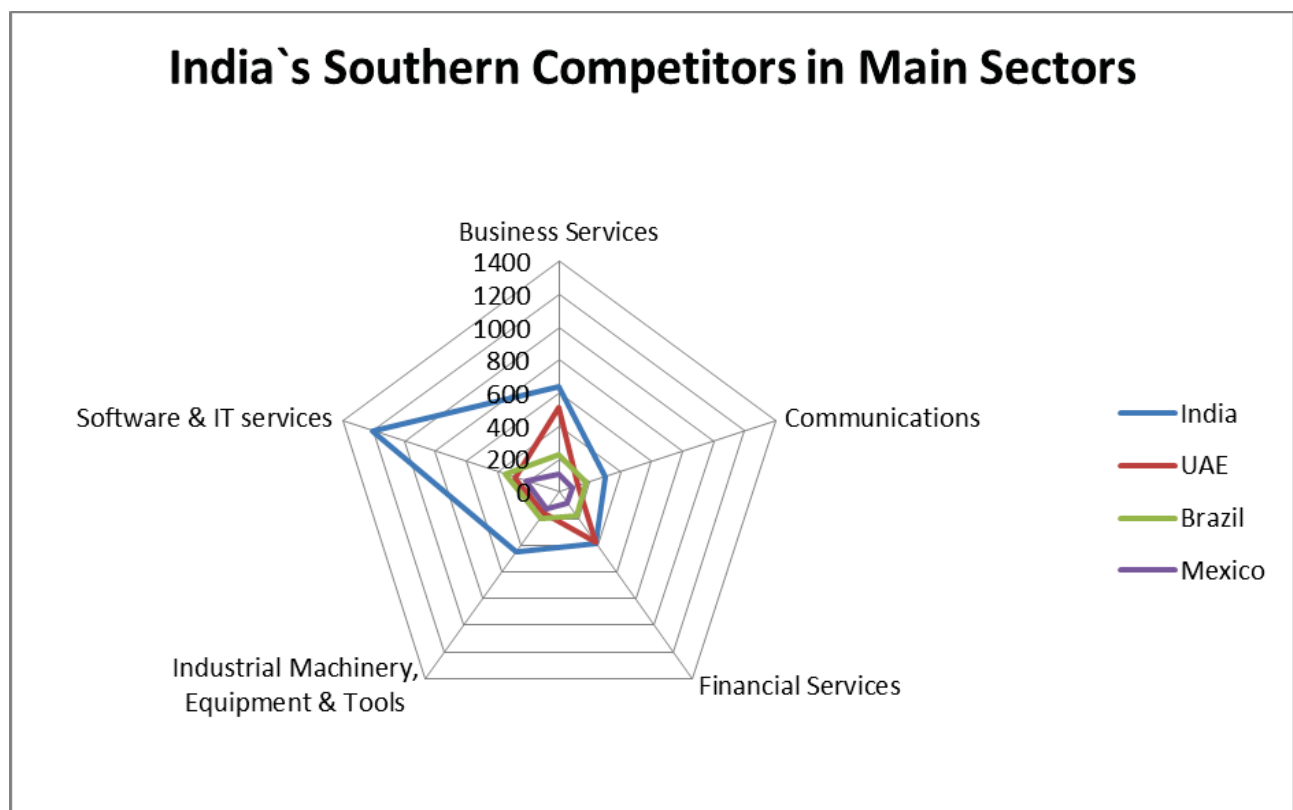
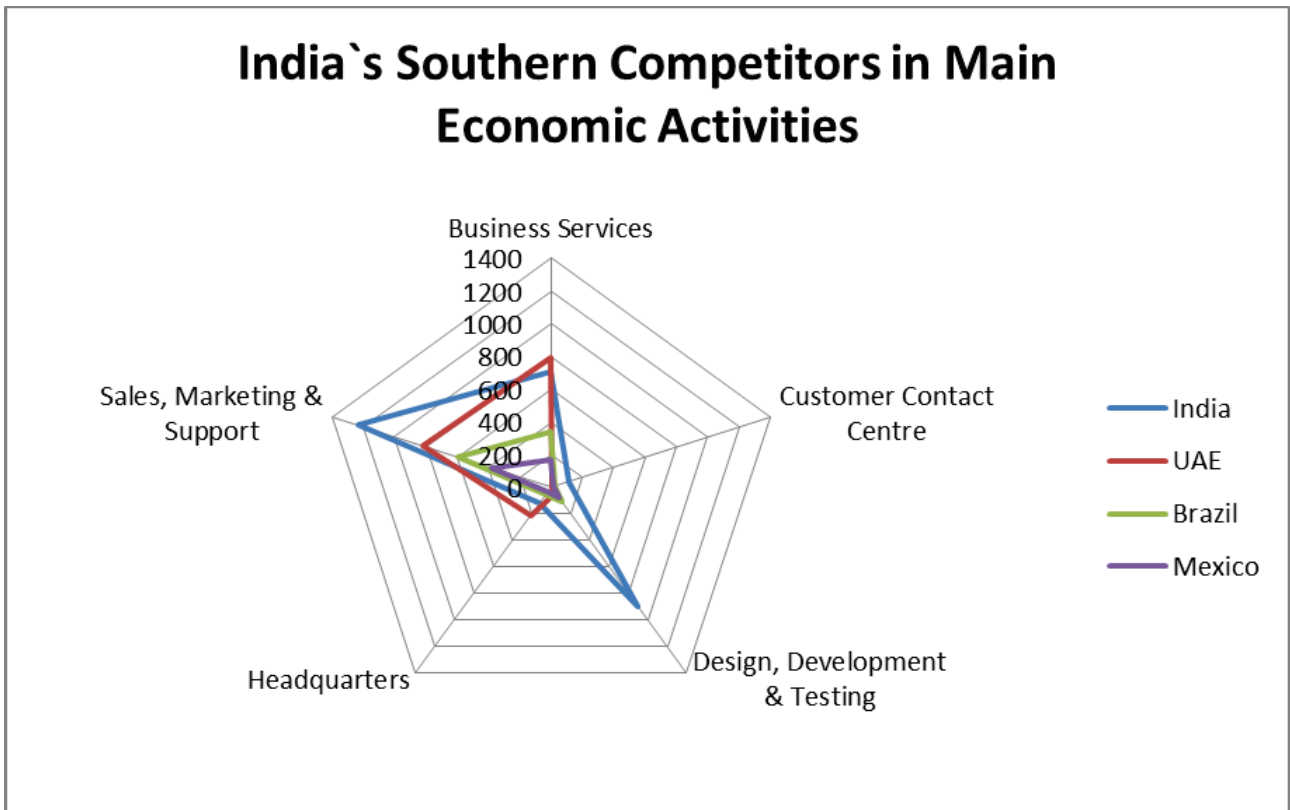


Figure 11 India's Competitors by Sectors



**Figure 12 India's Competitors by Activities**

#### 4.4.1.2 China

Of all FDI investments going to the global South, the biggest destination, getting about 27.87% of FDI is China.

China is also the biggest investor in the South-North network, origin for 26.48% of FDI investments.

In the South-South network, China is the 3<sup>rd</sup> biggest origin, with 8.31% of FDI investments, and it is the number one destination, getting 9.28% of the FDI investments. China is origin for 44 FDI destinations and attracts FDI from 23 countries.

China's main competitors in attracting FDI are India, the UAE and Brazil.

The main industrial sectors where they compete are: Business Services, Chemicals and Financial Services, Industrial Machinery, Equipment & Tools and Software & IT services.

The main economic activities where they compete are: Business Services, Customer Contact Centre Design, Development & Testing, Headquarters and Sales, and Marketing & Support.

## China`s Southern Competitors in Main Sectors

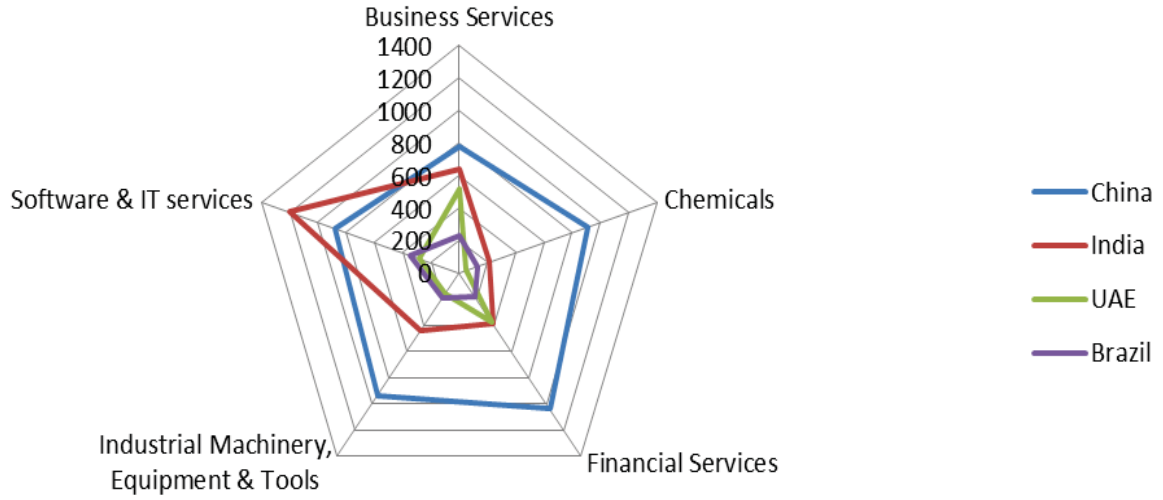


Figure 13 China`s Competitors by Sectors

## China`s Southern Competitors in Main Economic Activities

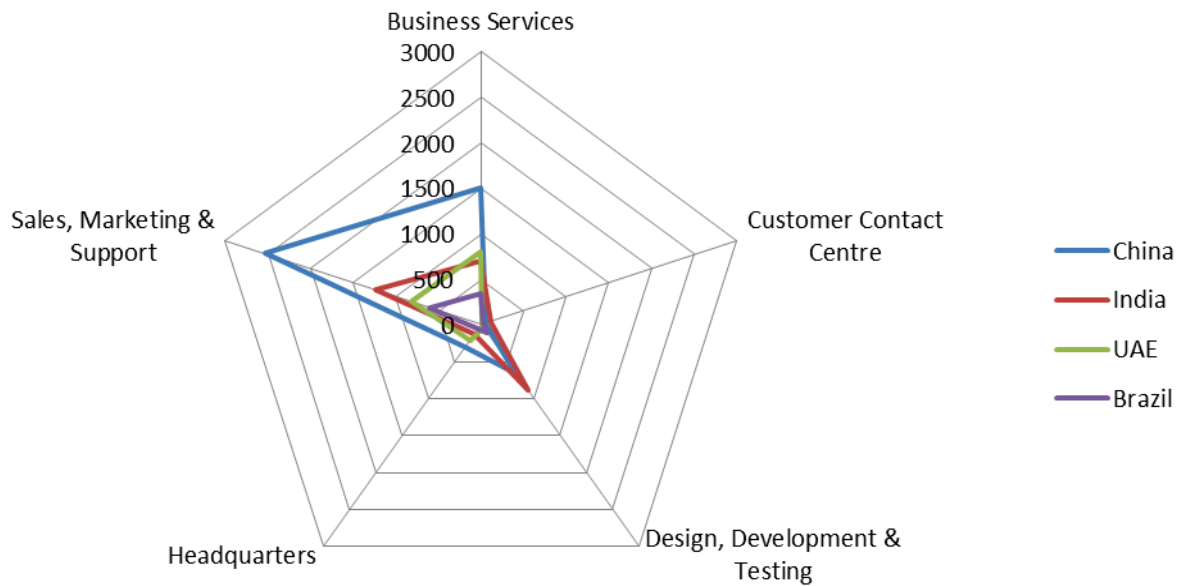


Figure 14: China`s Competitors by Activities

### 4.4.1.3 Malaysia

Of all FDI investments going to the South, Malaysia with its contribution of 0.95% is only the 20<sup>th</sup> strongest origin, but the 7<sup>th</sup> most important destination, getting about 2.74% of FDI investments.

Malaysia is also the 7<sup>th</sup> biggest investor in the South-North network, origin for 2.97% of the FDI investments.

In the South-South network, Malaysia is the 4<sup>th</sup> biggest investor, origin for 6.88% of FDI transactions; and the 11<sup>th</sup> most important destination, getting 2.37% of FDI transactions. It is origin for 27 FDI destinations and attracts FDI from 13 countries.

Malaysia's main FDI competitors are Vietnam and Turkey:

Another competitor in the industrial sector is South Africa. The main sectors where they compete are: Business Services, Financial Services, Food & Tobacco, Industrial Machinery, Equipment & Tools, and Software & IT Services.

Another competitor in economic activities is Argentina. The main activities where they compete are: Business Services, Customer Contact Centre Design, Development & Testing, Headquarters, Sales, and Marketing & Support.

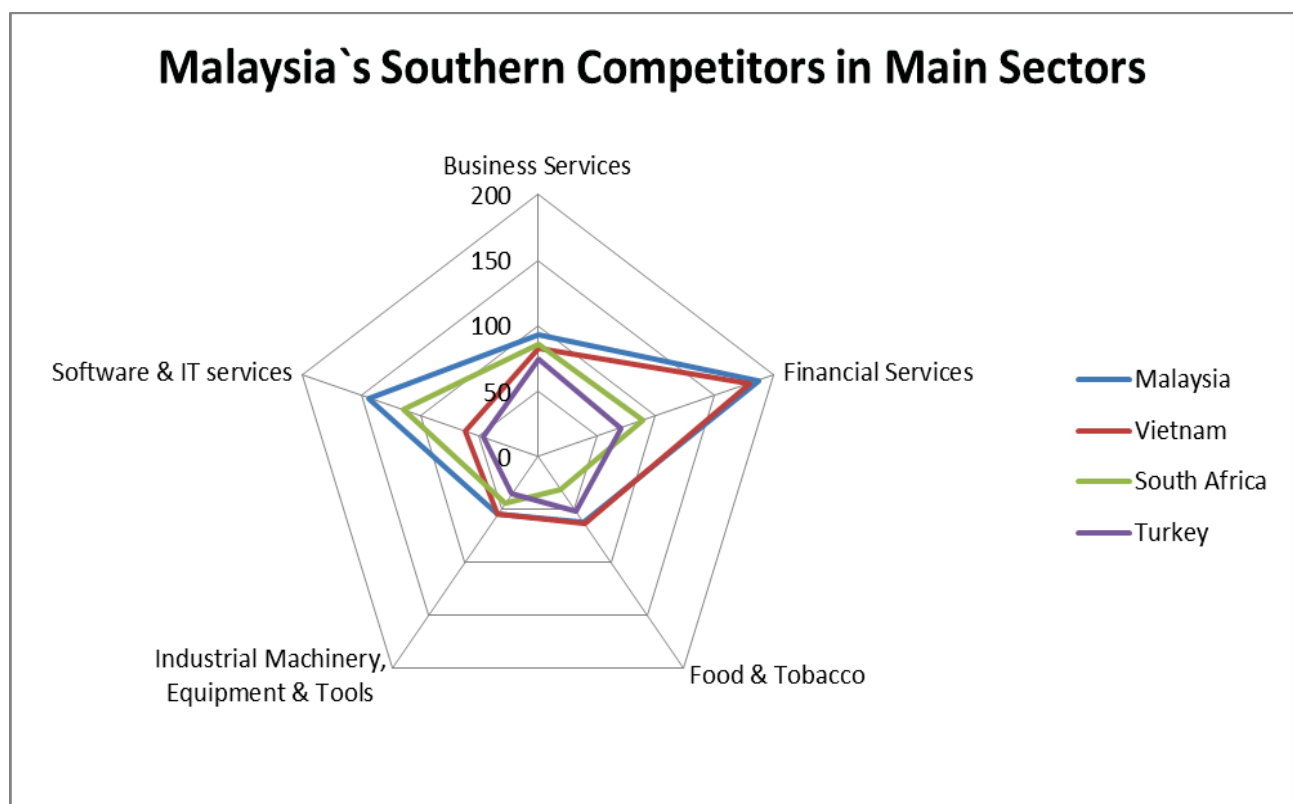


Figure 15: Malaysia's Competitors by Sectors

## Malaysia's Southern Competitors in Main Economic Activities

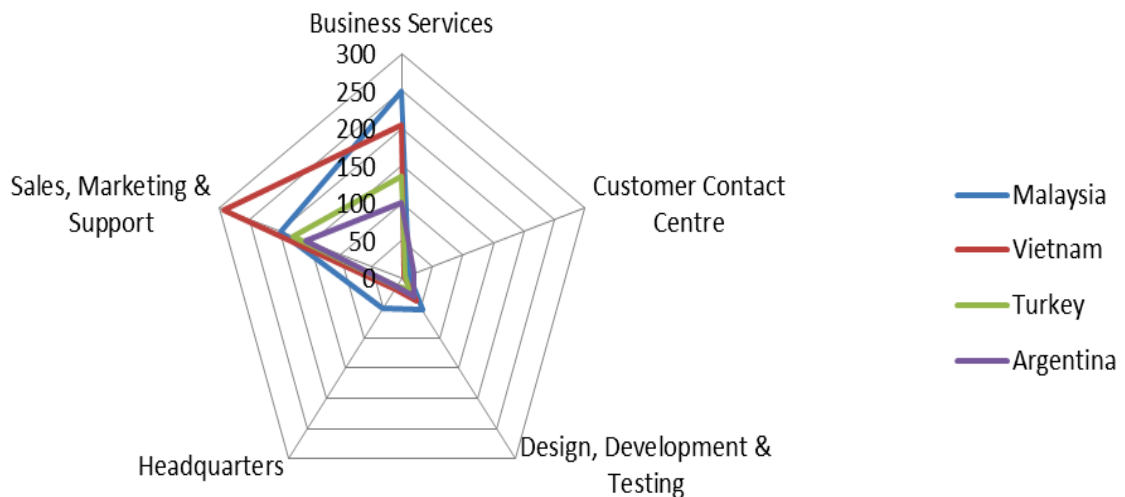


Figure 16: Malaysia's Competitors by Activities

### 4.4.2 The Middle East

See Annex 4: Network, Total FDI Destination Middle East

#### 4.4.2.1 The UAE

The UAE ranks 4<sup>th</sup> in attraction of FDI in the global South.

Of all FDI investments going to the South, the UAE, contributing 2.27% is just the 10<sup>th</sup> strongest origin; it is the 3<sup>th</sup> most important destination, getting about 6.23% of FDI investments.

The UAE is also the 3<sup>th</sup> biggest investor in the South-North, origin for 10.19% of the FDI investments.

In the South-South network, the UAE is the 2<sup>nd</sup> biggest investor, origin for 16.44% of the FDI investments; it is the 2<sup>nd</sup> most important destination, getting 8.31% of FDI investments. It is origin for 43 FDI destinations and attracts FDI from 23 countries.

UAE's main FDI competitors are Vietnam and Malaysia:

In addition, by industry sector Brazil. The main sectors where they compete are: Business Services, Communications, Financial Services, Industrial Machinery, Equipment & Tools, and Software & IT services. UAE excels in Business and Financial Services.

In addition, by activity Turkey. The main activities are: Business Services, Customer Contact Centre and Design, Development & Testing, Headquarters and Sales, Marketing & Support.

## UAE's Southern Competitors in Main Sectors

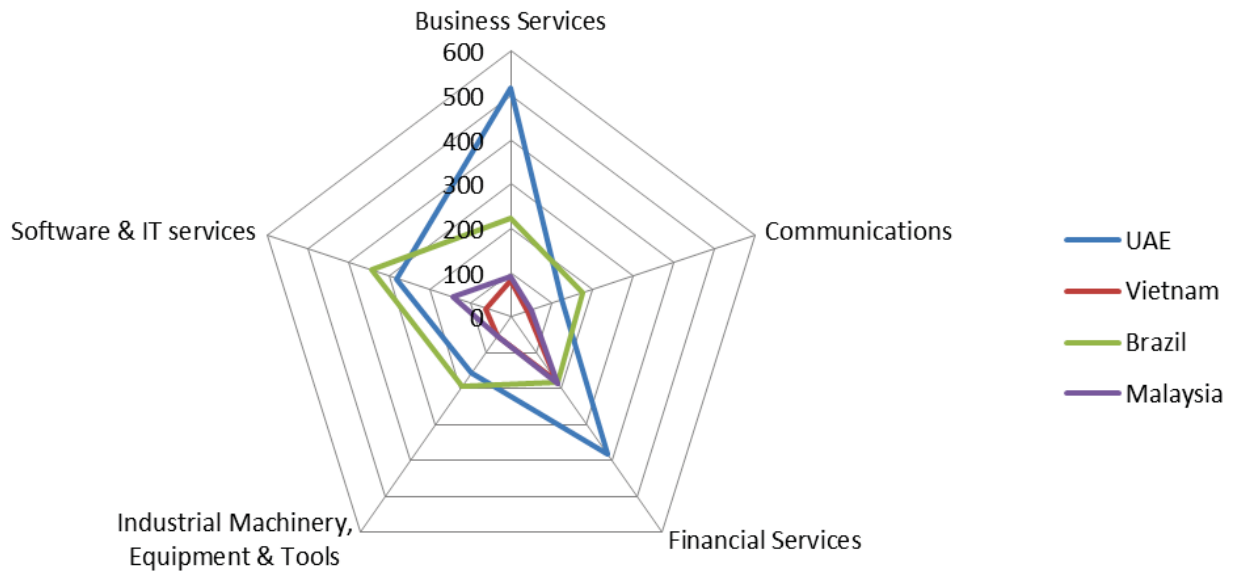


Figure 17: UAE's Competitors by Sectors

## UAE's Southern Competitors in Main Economic Activities

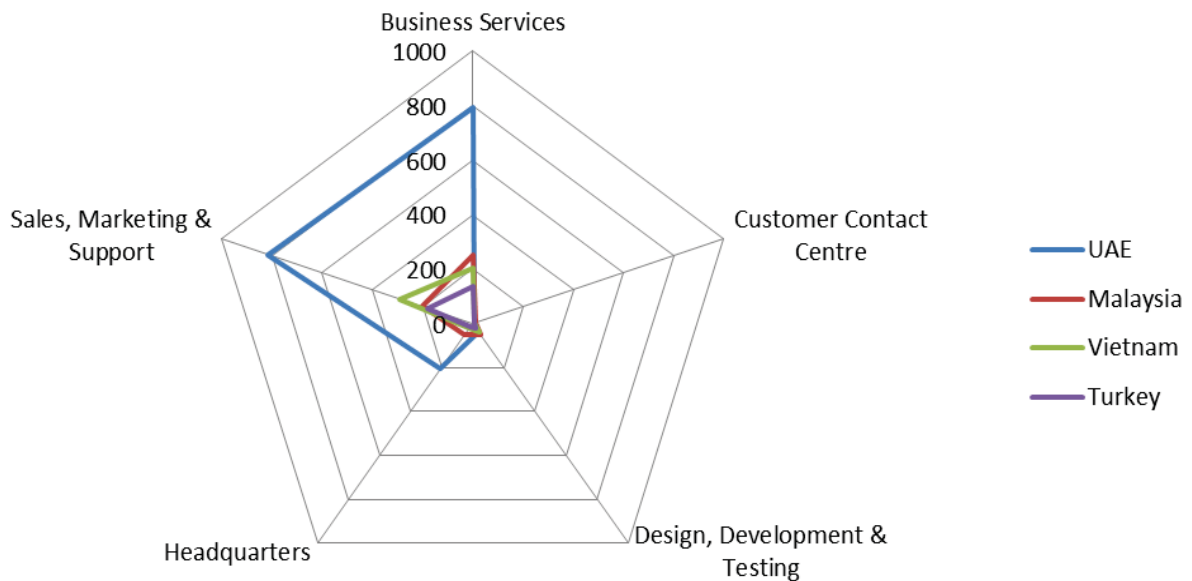


Figure 18: UAE's Competitors by Activities

### 4.4.2.2 Saudi Arabia

Saudi Arabia ranks 1<sup>st</sup>; in attraction of FDI in the global South.

From all FDI investments going to the South, Saudi Arabia with 0.53% is just the 27<sup>th</sup> origin and the 13<sup>th</sup> destination, getting about 1,58% of FDI investments.

Saudi Arabia is the 10<sup>th</sup> biggest investor in the South-North network, origin for 1.69% of the FDI investments.

In the South-South network, Saudi Arabia is the 7<sup>th</sup> biggest origin with 3.85% of the FDI investments and the 5<sup>th</sup> destination getting 3.57% of FDI investments. It is origin for 30 FDI destinations and attracts FDI from 14 countries.

Saudi Arabia's main competitors in attracting FDI are:

In the industrial sector, Turkey, Morocco and Qatar. The main sectors where they compete are: Business Services, Financial Services, Hotels & Tourism, Real Estate and Textiles.

By economic activity, Turkey, Colombia and Egypt. The main activities where they compete are: Business Services, Customer Contact Centre, Design, Development & Testing, Headquarters, Sales, and Marketing & Support.

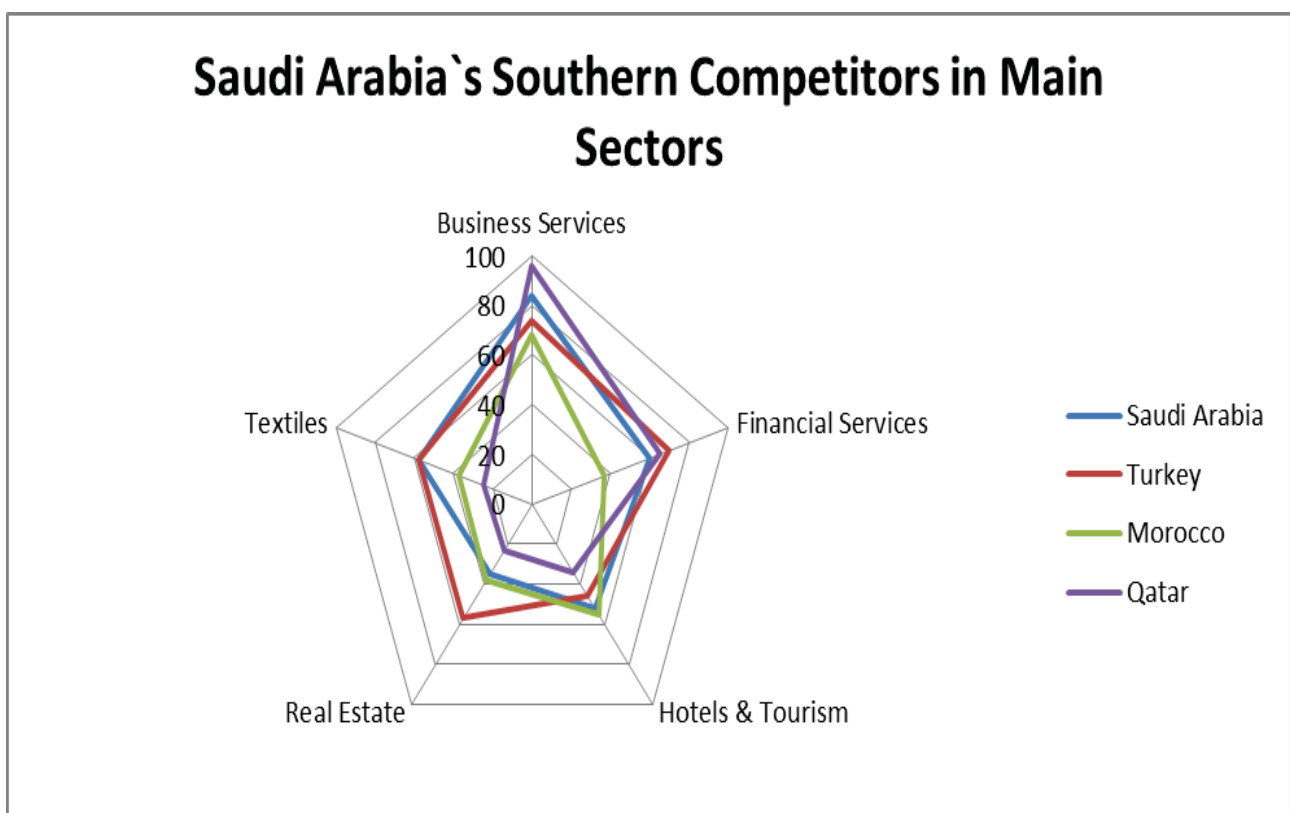
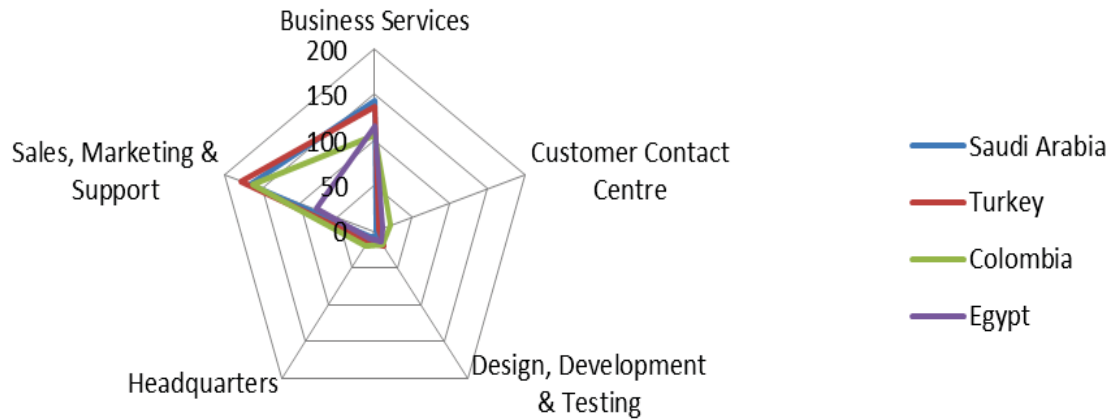


Figure 19: Saudi Arabia's Competitors by Sectors

## Saudi Arabia`s Southern Competitors in Main Economic Activities



**Figure 20: Saudi Arabia`s Competitors by Activities**

### 4.4.2.3 Kuwait

Kuwait is an important origin of FDI investments in the region, but a very weak destination for FDI investments.

Of all the FDI investments going to the South, Kuwait, origin for 2.81% of the FDI investments, is the 9<sup>th</sup> most important investor.

Kuwait is also the 9<sup>th</sup> biggest investor in the South-North network, origin for 1.74% of the FDI investments.

In the South-South network, Kuwait is the 9<sup>th</sup> biggest investor, origin for 2.81% of FDI investments. It is origin for 28 FDI destinations and attracts FDI from only 4 countries.

Kuwait`s main FDI competitors are:

By industrial sector: Lebanon, El Salvador and Honduras. The main sectors where they compete with Kuwait are: Business Services, Communications, Consumer Products, Financial Services, and Textiles. Kuwait excels in Textiles and Consumer products.

In terms of economic activity: Syria, Lebanon, and Myanmar (Burma). The main activities where these countries compete with Kuwait are: Business Services, Customer Contact Centre Design, Development & Testing, Headquarters, Sales, and Marketing & Support.



## Kuwait's Southern Competitors in Main Sectors

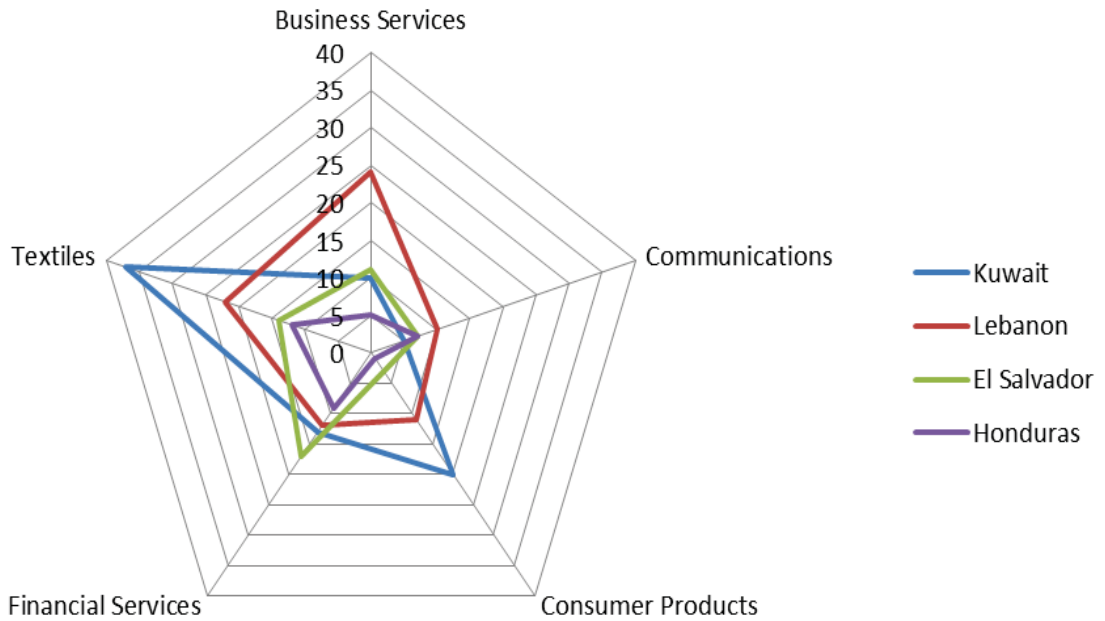


Figure 21: Kuwait's Competitors by Sectors

## Kuwait's Southern Competitors in Main Economic Activities

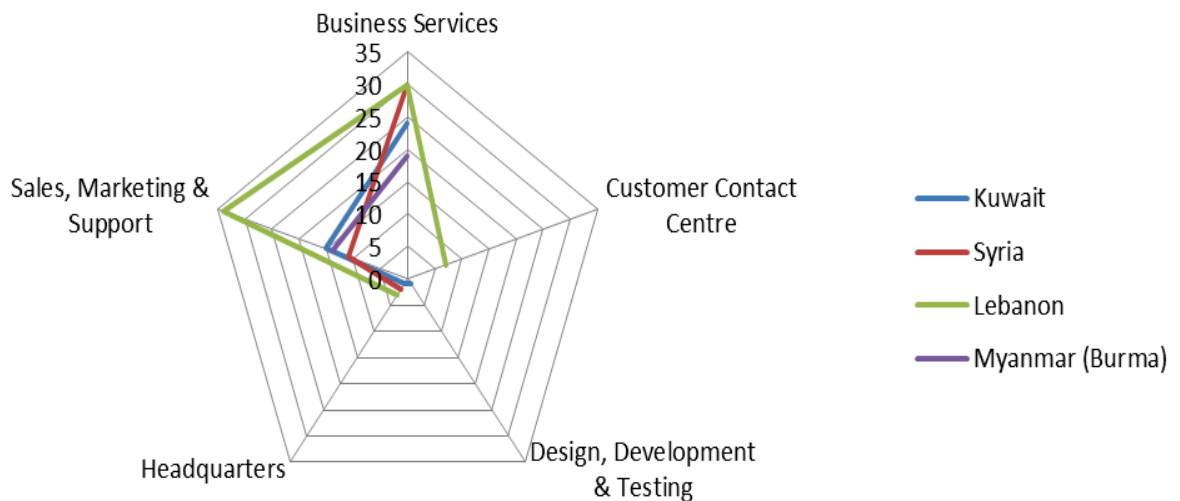


Figure 22: Kuwait's Competitors by Activities

### 4.4.3 LatinAmerica

See Annex 5: Network, Total FDI Destination Middle East

Brazil dominates FDI in the region, having attracted almost two-fifths of FDI in Latin America and the Caribbean in 2012. (Schwab and World Economic Forum, 2012)

#### 4.4.3.1 Brazil

Brazil ranks 8<sup>th</sup> in the global South in the attraction of FDI investments.

Of all FDI investments going to the South, Brazil, with 0.68%, is just the 26<sup>th</sup> most important origin of FDI investments; it is the 4<sup>th</sup> most important destination, responsible for about 5.85% of FDI investments.

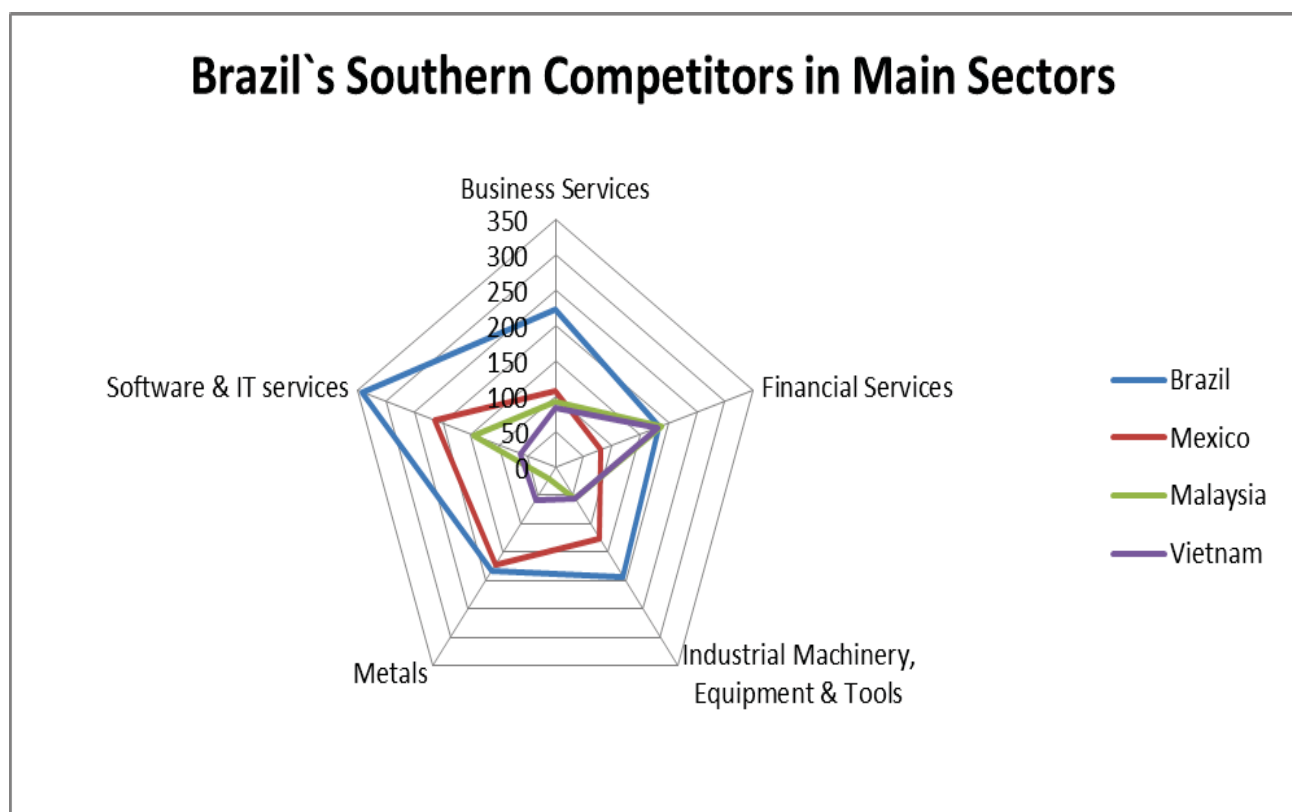
Brazil is the 5<sup>th</sup> biggest investor in the South-North network, origin for 4.75% of the FDI investments.

In the South-South network, Brazil is the 6<sup>th</sup> biggest investor, origin for 4.91% of FDI investments; it is the 4<sup>th</sup> most important destination, getting 3.60% of the FDI investments. It is origin for 30 FDI destinations and attracts FDI from 16 countries.

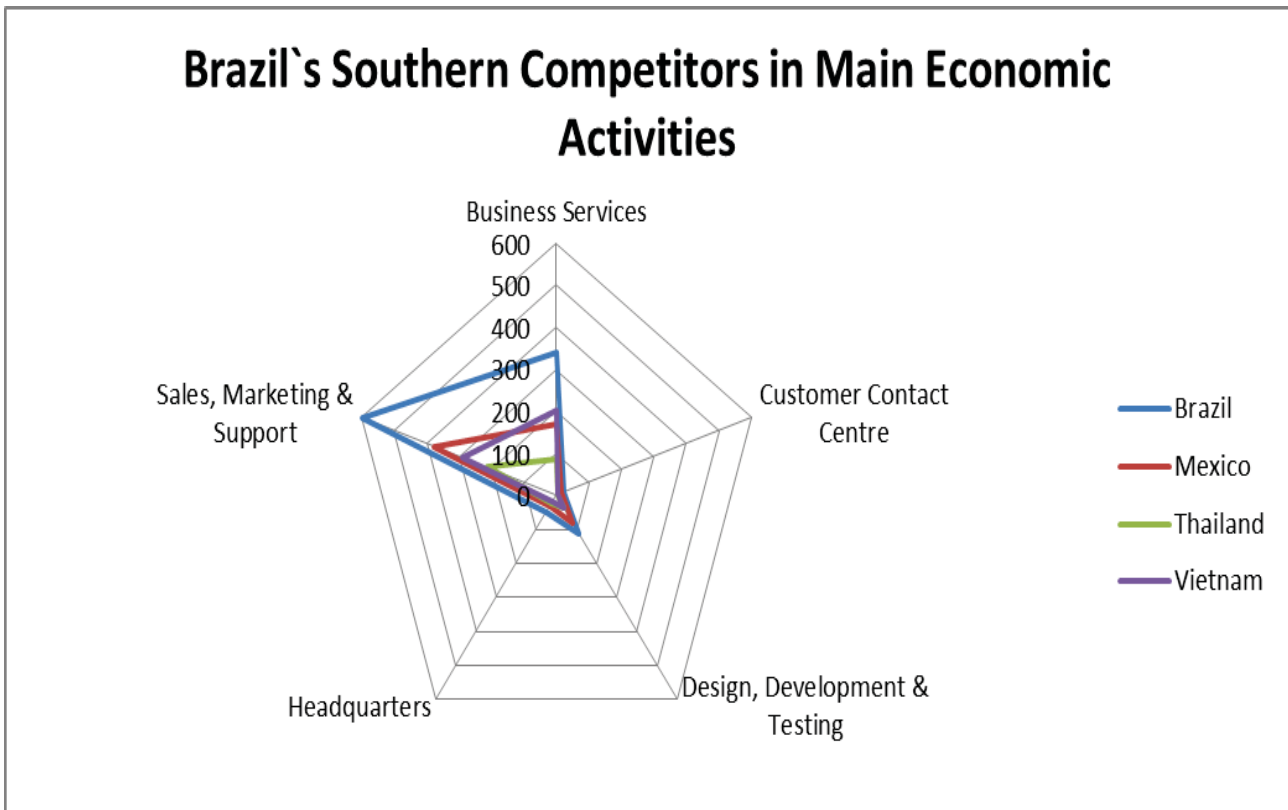
Brazil's main FDI competitors are Mexico and Vietnam:

In the industrial sector, Malaysia is another main competitor. The 3 main sectors where these countries compete with Brazil are: Business Services, Financial Services, Industrial Machinery, Equipment & Tools, Metals, and Software & IT Services, and Hotels & Tourism.

In terms of economic activity, Thailand is another main competitor. The main activities in which these countries compete with Brazil are: Business Services, Customer Contact Centre, Design, Development & Testing, Headquarters, Sales, and Marketing & Support.



**Figure 23: Brazil's Competitors by Sectors**



**Figure 24: Brazil's Competitors by Activities**

#### 4.4.3.2 Mexico

Mexico ranks 13<sup>th</sup> in the attraction of FDI investment in the global South.

Of all FDI investments going to the South, Mexico, with 4.84%, is the 4<sup>th</sup> most important destination.

Mexico is the 8<sup>th</sup> biggest investor in the South-North network, origin for 2.5% of the FDI investments.

In the South-South network, Mexico is not a big origin but is the 12<sup>th</sup> most important investment destination, getting 2.37% of the FDI transactions. It is origin for 15 FDI destinations, mainly in Latin America, and it attracts FDI from 11 countries.

Mexico's main competitors are: Brazil and Thailand

Malaysia is another main competitor in industrial sectors. The main sectors in which these countries compete with Mexico are: Business Services, Financial Services, Industrial Machinery, Equipment & Tools, Metals, and Software & IT services.

Vietnam is another main competitor in economic activity. The main economic activities in which these countries compete with Mexico are: Business Services, Customer Contact Centre and Design, Development & Testing, Headquarters, Sales, and Marketing & Support.

## Mexico's Southern Competitors in Main Sectors

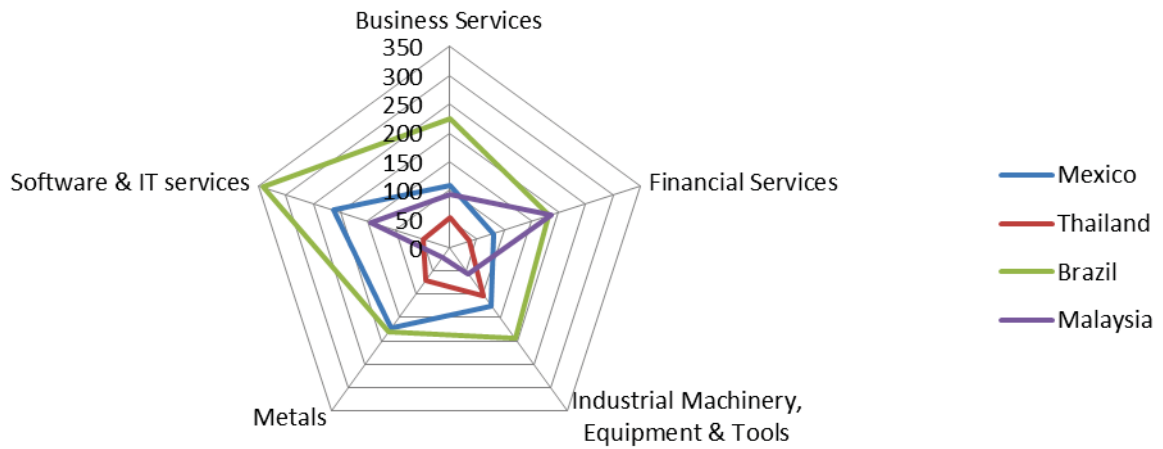


Figure 25: Mexico's Competitors by Sectors

## Mexico's Southern Competitors in Main Economic Activities

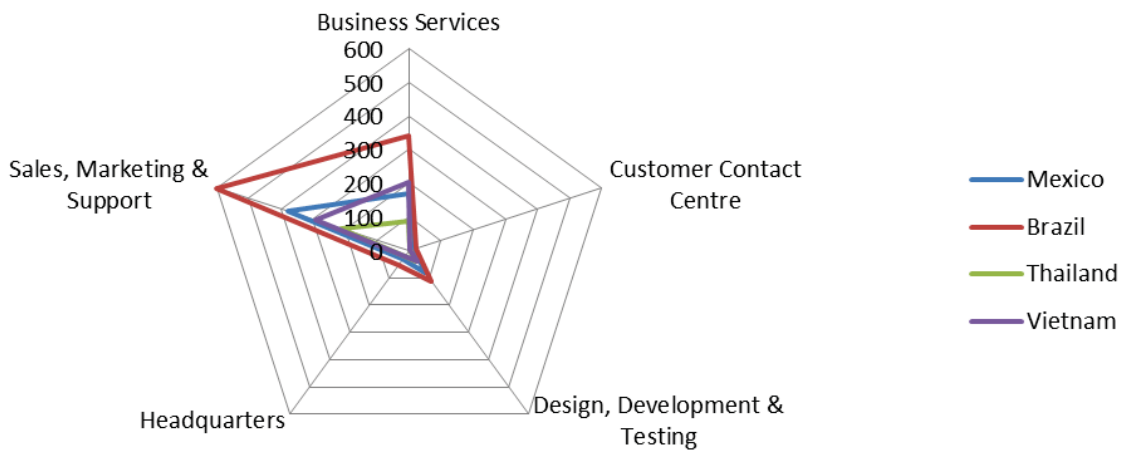


Figure 26: Mexico's Competitors by Activities

### 4.4.3.3 Colombia

Colombia ranks 7<sup>th</sup> in the global South in attracting FDI investments.

Of all FDI investments going to the South, Colombia, with 1.52%, is the 14<sup>th</sup> most important destination.

Colombia is the 21<sup>th</sup> biggest investor in the South-North network, origin for 0.46% of the FDI investments.

In the South-South network, Colombia is the 24<sup>th</sup> most important investor, origin for 0.6% of the investments, but the 8<sup>th</sup> most important destination, getting 2.65% of FDI investments. It is origin for 7 FDI destinations, only in Latin America; it attracts FDI from 11 countries, mainly in the Asia Pacific region.

Colombia's competitors are:

In industrial sectors: Argentina, Egypt and Chile. The main sectors in which these countries compete with Colombia are: Business Services, Coal, Oil and Natural Gas, Financial Services, Food & Tobacco, and Software & IT Services.

In economic activities: Saudi Arabia, Chile and Argentina. The main economic activities in which these countries compete with Colombia are: Business Services, Customer Contact Centre, Design, Development & Testing, Headquarters, Sales, and Marketing & Support.

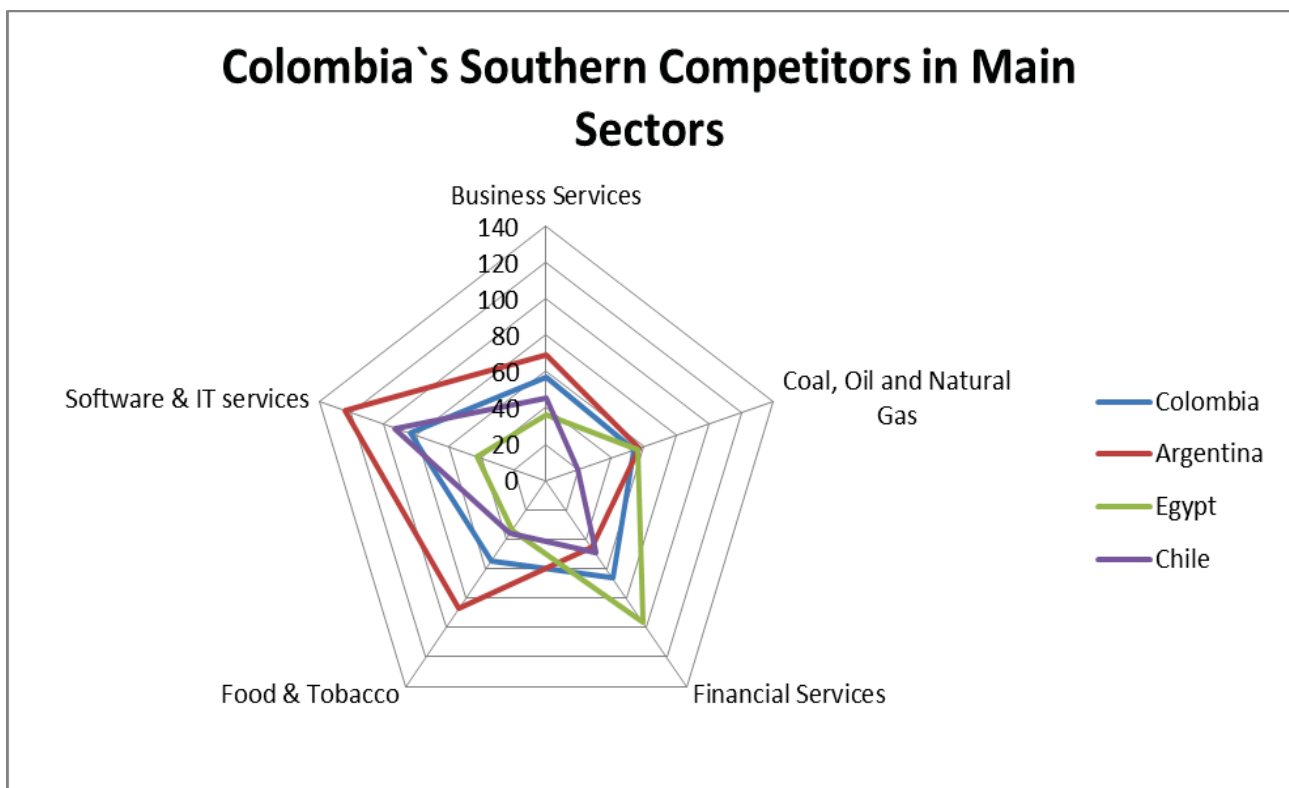
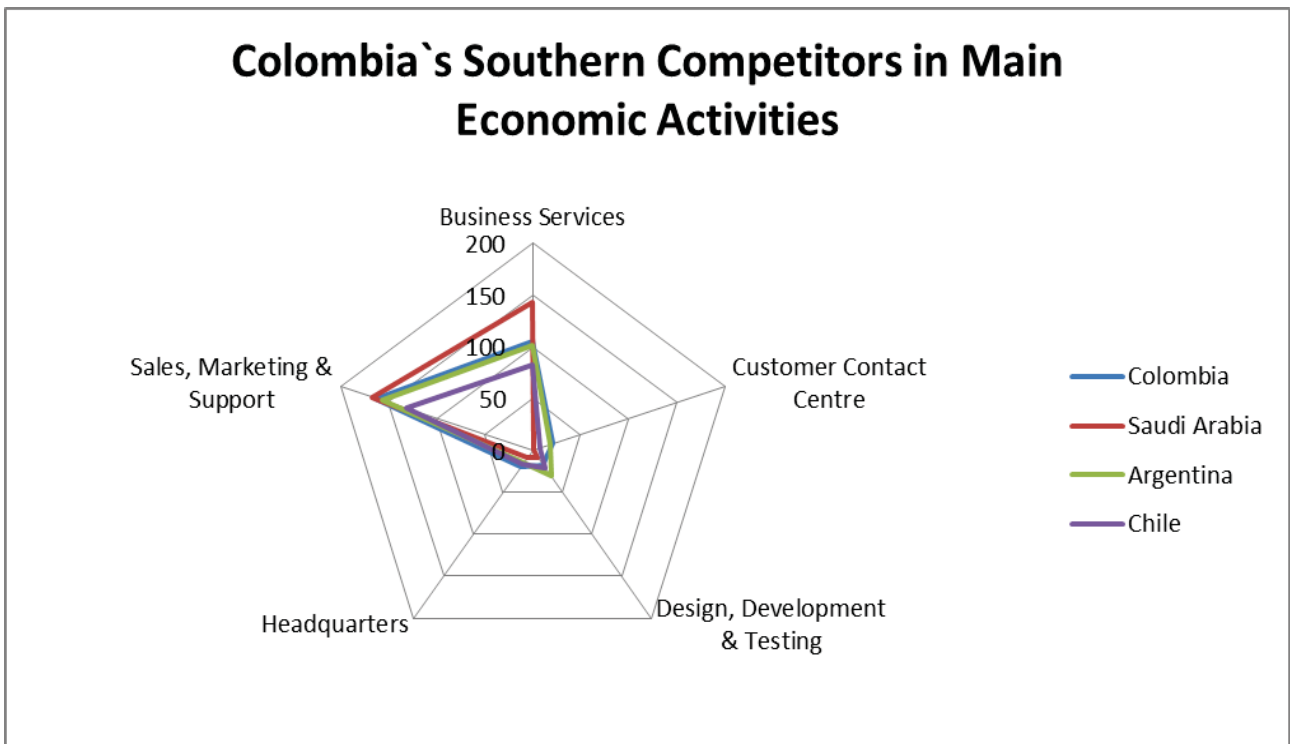


Figure 27: Colombia's Competitors by Sectors



**Figure 28: Colombia's Competitors by Activities**

#### 4.4.4 Africa

##### 4.4.4.1 South Africa

South Africa ranks 7<sup>th</sup> in attracting FDI investment in the global South.

Of all FDI investments going to the South, Africa ranks 10<sup>th</sup> as destination.

In the South-North network, South Africa is ranked as the 6<sup>th</sup> most important origin.

In the South-South network South Africa is the 5<sup>th</sup> biggest investor, origin for 5% of FDI investments, but only the 16<sup>th</sup> biggest destination country, getting 2% of the FDI investments. South Africa is the best connected African country; it is the FDI origin for 28 destinations and attracts FDI from 16 countries.

South Africa's main competitors by industrial sector are: Argentina, Chile and Colombia, in that order. The main sectors they compete in are: Business Services, Financial Services, Food & Tobacco, Metals, and Software & IT Services.

South Africa's main competitors by economic activity are Chile, Argentina and Turkey. They compete with each other in: Business Services, Customer Contact Centre and Design, Development & Testing, Headquarters, Sales, and Marketing & Support.

## SA`s Southern Competitors in Main Sectors

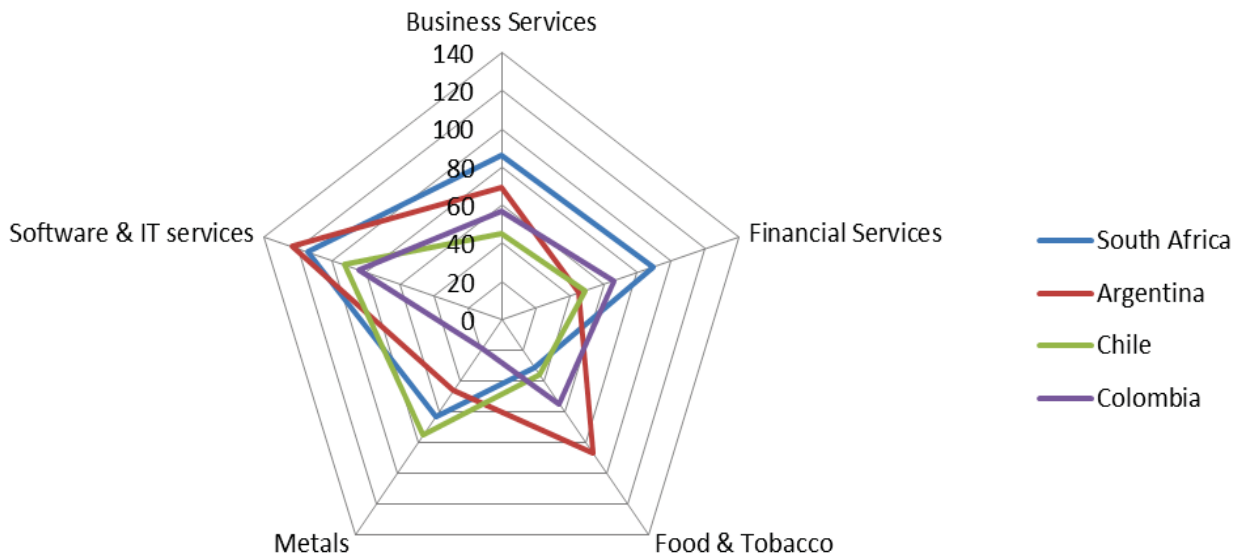


Figure 29: South Africa`s Competitors by Sectors

## SA`s Southern Competitors in Main Economic Activities

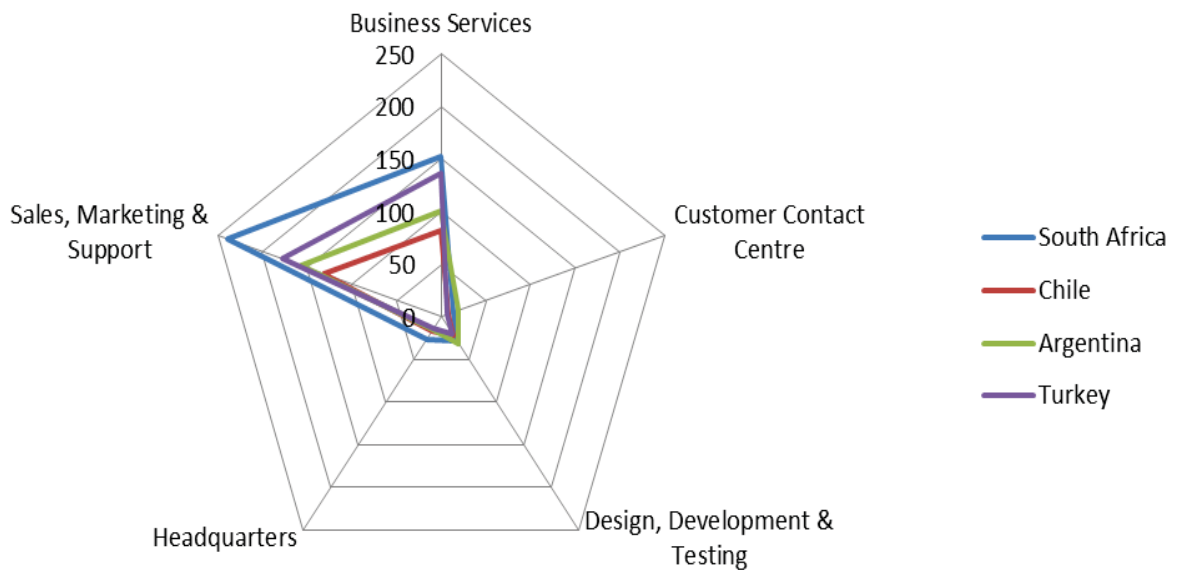


Figure 30: South Africa`s Competitors by Activities

#### 4.4.4.2 Egypt

Egypt ranks 15<sup>th</sup> in attraction of FDI in the global South.

Of all FDI investments going to the South Egypt is the 16<sup>th</sup> most important destination of FDI investments, getting 1.25%.

In the South-South network Egypt is the 16<sup>th</sup> biggest investor, origin for 1.5% of the FDI investments; it is the 6<sup>th</sup> biggest destination, getting 3.5% of the FDI investments. Egypt has 22 FDI destinations, mainly in Africa and the Middle East. It attracts FDI from 15 countries, mainly from the Middle East.

Egypt's main FDI destination competitors by industrial sector are: Morocco, Colombia and Qatar. The main sectors in which they compete are: Business Services, Coal, Oil and Natural Gas, Financial Services, Hotels & Tourism and Software & IT Services.

Egypt's main competitors by economic activity are: Morocco, Qatar and Algeria, in that order. The main economic activities in which they compete are: Business Services, Customer Contact Centre, Design, Development & Testing, Headquarters, Sales, and Marketing & Support.

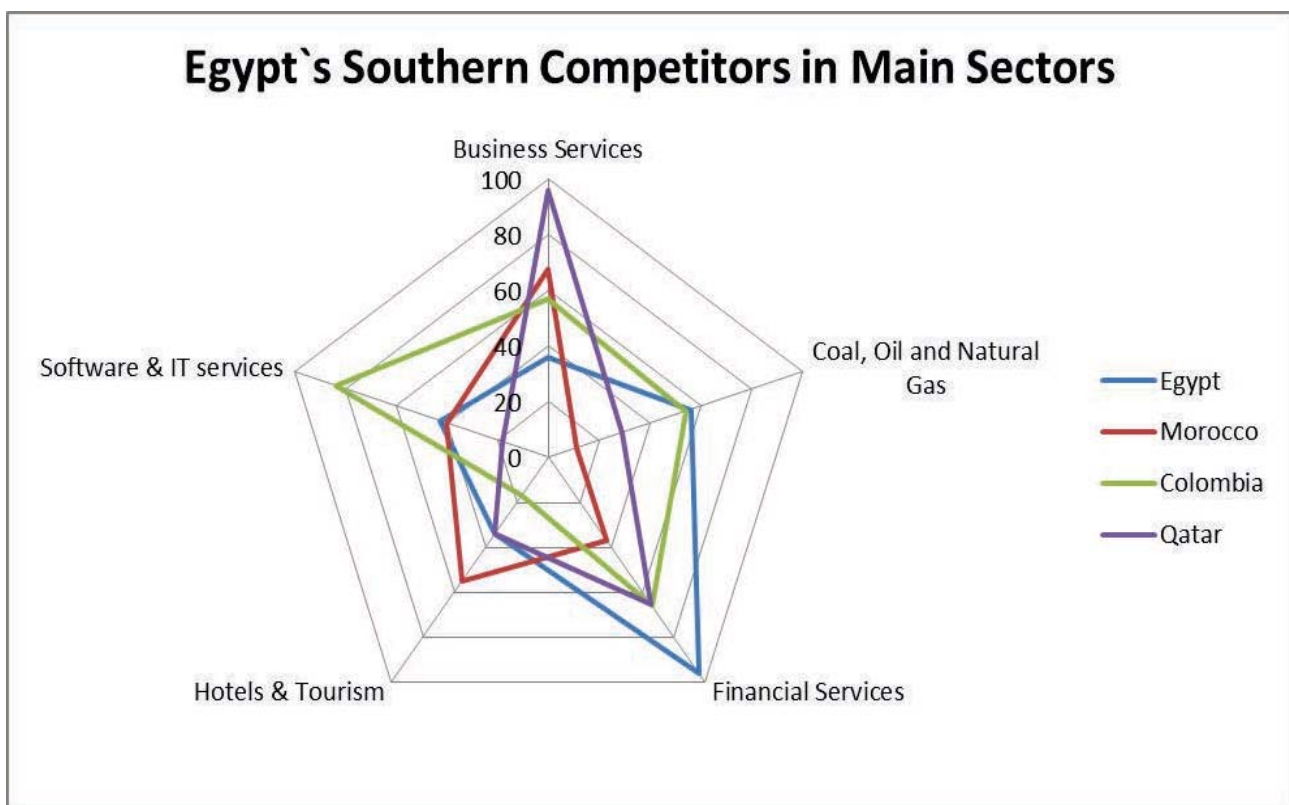
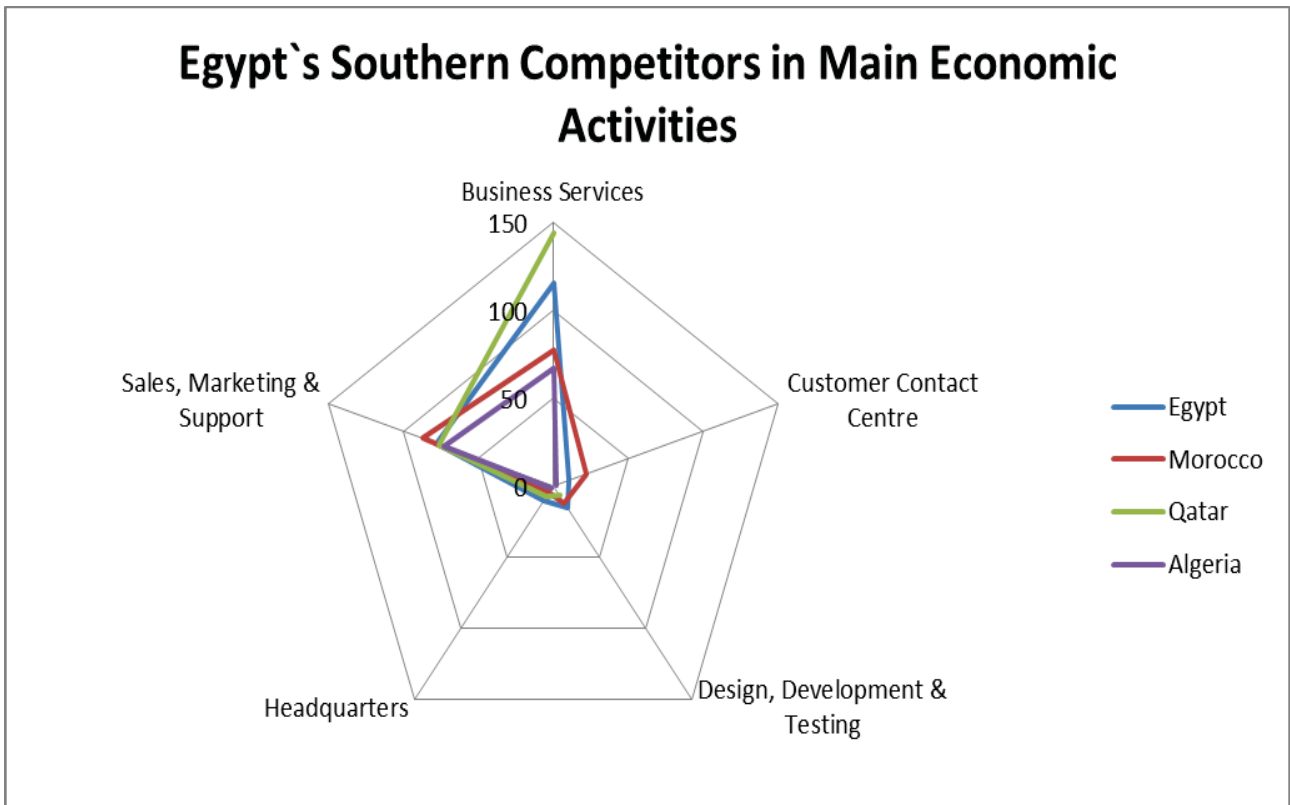


Figure 31: Egypt's Competitors by Sectors





**Figure 32: Egypt`s Competitors by Activities**

#### 4.4.4.3 Nigeria

Nigeria ranks 15<sup>th</sup> in attraction of FDI in the global South.

Nigeria has 11 FDI destinations: 9 in Africa, 1 in the Middle East and 1 in the Asia Pacific. It attracts FDI from 10 countries: 1 in Latin America, 2 from Africa, 3 from the Middle East, 3 from the Asia Pacific and 1 from the Rest of Europe.

Nigeria is the 17<sup>th</sup> most important investor in the South-South network, origin for 1,5% of FDI investments; it is the 17th biggest destination, getting about 1.5% of FDI investments.

Nigeria`s main FDI competitors are:

By industrial sector: Kenya, Pakistan and Panama. The main sectors where they compete are: Business Services, Coal, Oil and Natural Gas, Communications, Financial Services, Software & IT Services. Nigeria excels in Coal, Oil and Natural Gas and Business Services.

By economic activity: Tunisia, Algeria and Kazakhstan. The main sectors where they compete are: Business Services, Customer Contact Centre Design, Development & Testing, Headquarters, Sales, and Marketing & Support.

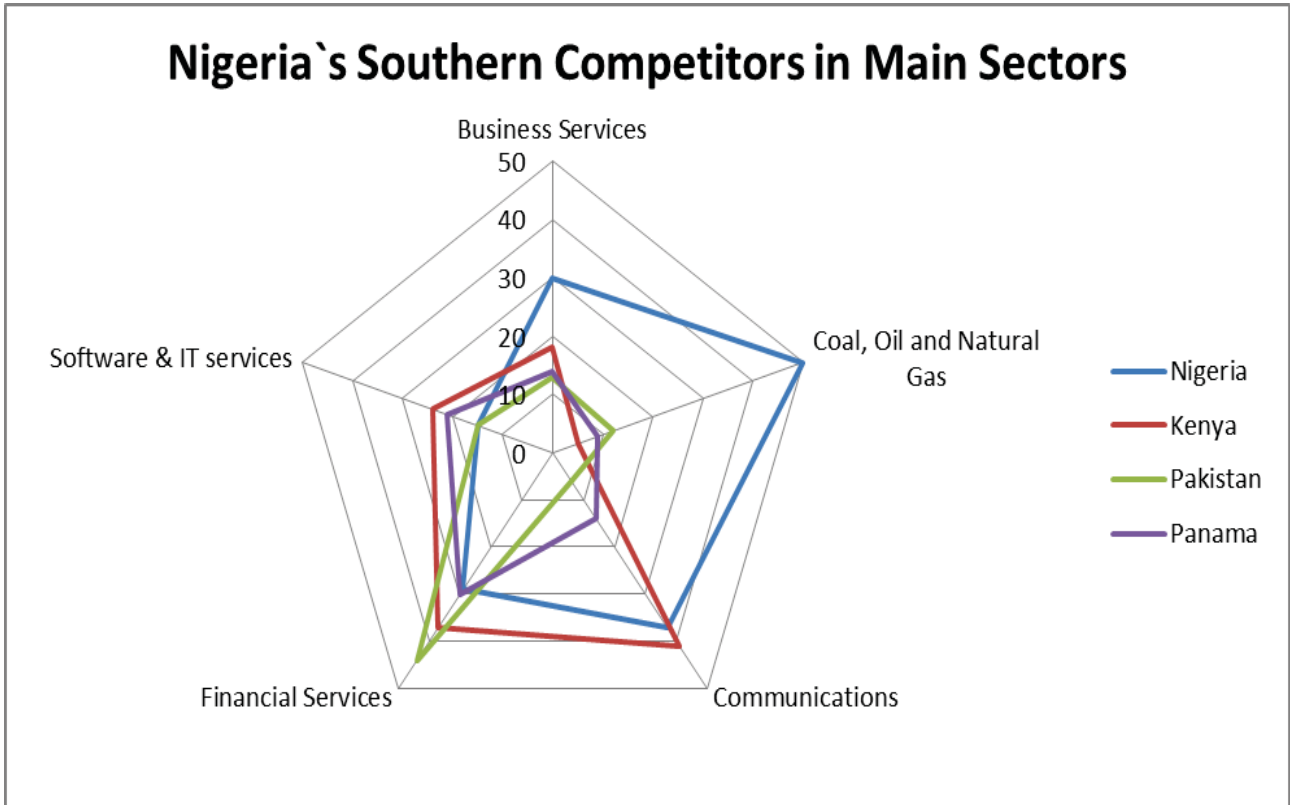


Figure 33: Nigeria`s Competitors by Sectors

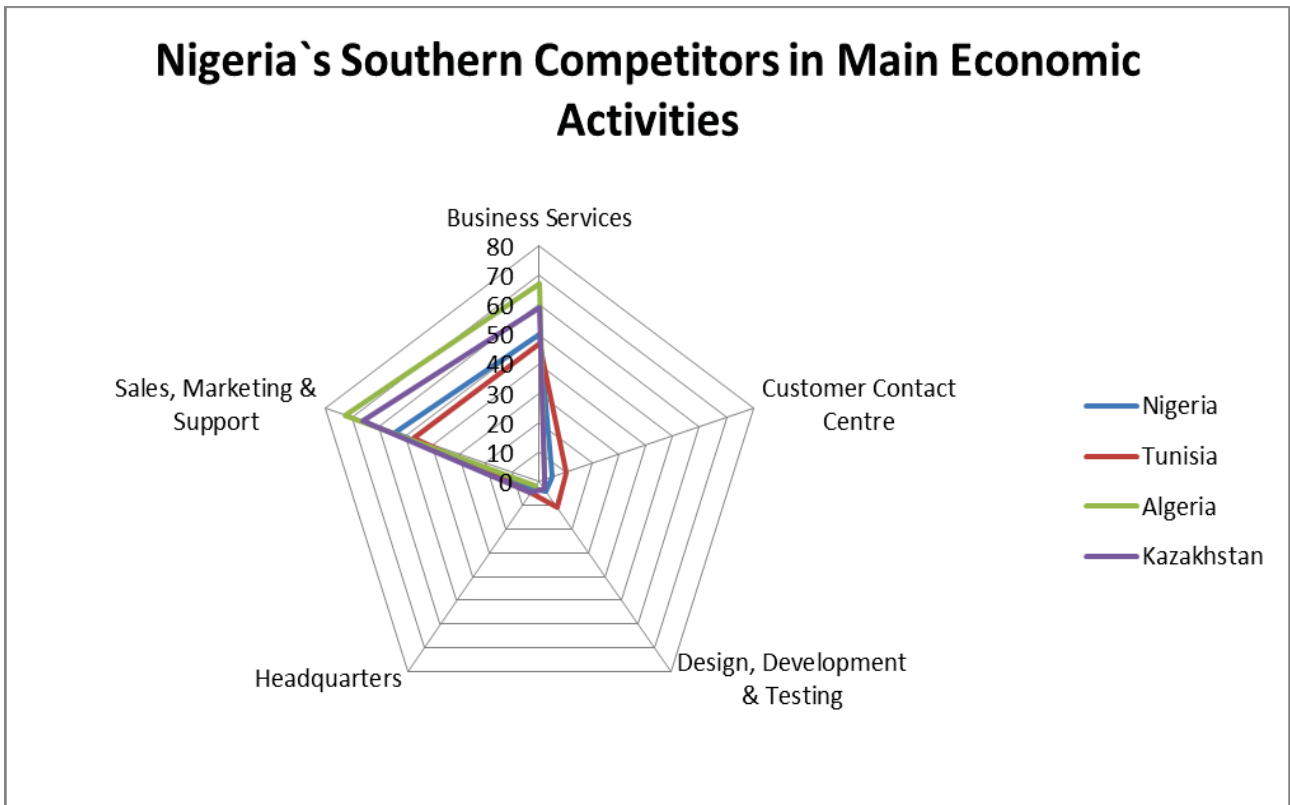


Figure 34: Nigeria`s Competitors by Activities

## 4.5 Location Factors

### 4.5.1 The Relation between Total FDI and Location Factors in the South

A series of regression analyses were conducted to establish the factors that significantly contributed to variation in FDI.

The total number of FDI investments with destination South, and location factors for 127 countries in the South were analysed in the regression.

In the first regression analysis, the Global Competitive Index was used as a lone predictor of FDI. In the second regression analysis, all twelve competitive pillars were used as predictors of FDI. Finally, for those pillars which had a significant effect on FDI, additional regression analyses were conducted in which the sub-indicators for these pillars were used to predict FDI. Below, the significant regression weights (B) have been reported together with the significance levels (\* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ ). For all analyses, the  $R^2$ , that is, the proportion of variance in FDI was also reported.

Location factors determinant to attract FDI:

The first regression analysis indicated that the Global Competitive Index was a statistically significant predictor for FDI inflows and showed a strong effect,  $B = 9.76^{***}$ .

Next, all twelve competitive pillars were included in the multiple regression analyses. Only four of the pillars had statistically significant effects. These were: Market Size, Innovation, Technological Readiness and Macroeconomic Environment (for regression weights and significances, see below).

Finally, additional regression analyses to explore in more detail which sub-indicators are significant within these four pillars were conducted. The results are reported below (with the significant sub-indicators indented below the corresponding pillar):

---

10 <sup>th</sup> Pillar:	Market size:	$B = 3.24^{***}$
	Domestic market size index:	$B = 3.80^{***}$
	Exports as a percentage of GDP:	$B = 0.58^{***}$
12 <sup>th</sup> Pillar:	Innovation:	$B = 2.41^{***}$
	Capacity for innovation:	$B = 3.59^{**}$
	Availability of scientists and engineers:	$B = 2.67^*$
	PCT patents, applications/million of population:	$B = 0.21^*$
9 <sup>th</sup> Pillar:	Technological readiness:	$B = 2.37^{***}$
	FDI and technology transfer:	$B = 4.88^{***}$
	Broadband Internet subscriptions/100 of pop.:	$B = 0.20^{**}$
	Mobile broadband subscriptions/100 of pop.:	$B = 0.18^*$
3 <sup>rd</sup> Pillar:	Macroeconomic environment:	$B = -0.96^*$
	Country credit rating, 0–100 (best):	$B = 3.018^{***}$
	Inflation, annual %:	$B = 0.617^{***}$
	General government debt %:	$B = 0.455^*$

---

The results show that FDI attraction in the South is strongly related to the pillars describing economies in the second and third stages of development; in other words efficiency and innovation driven economies. Only pillar 3, macroeconomic environment, belongs to economies at the first stage of development. However, the South is diverse and all stages of development are found there.

In contrast, the main factors driving multinational firms are similar. *Domestic market size* is the first determinant for a firm to invest abroad. The South offers vast, diverse and growing markets. In addition to its growing population, it also has the largest middle class ever in its history, with the acquisition power to consume value goods and services.

However, the sub-indicators indicate that while FDI is related to the market size, it should not be limited by it, and there should be the possibility to expand the market through exports. Exports are facilitated by communication, trade, networks, proximity and absence of trade barriers. So the better a country is integrated into a geographical area sharing a common market, common rules, and economic treaties, the bigger the chance for exports. In the network analysis, we identified two economic regions where Southern multinationals were operating: one in Latin America and another one between the Middle East, North Africa and the Asia Pacific.

The second determinant is *Innovation*. The Global Competitive Report emphasizes that competitiveness cannot be achieved through simple adaptation; instead, it demands constant innovation. According to Dunning (1998) there are created assets that enhance the comparative advantage of places. Those assets comprise: intellectual capital, location factors, clusters, connectivity with global networks, physical infrastructure and favourable governmental policies. Once there is available intellectual capital, in this case, according to the Global Competitiveness Report, *availability of scientists and engineers*, and the location factors are in place, the *Capacity for innovation* and number of *PCT patent, applications* follow.

The third determinant is *Technological readiness*, measured by the effect of FDI and foreign technology on local firms. The sub-indicator, *FDI and technology transfer*, is related to the knowledge and technology that come along with FDI flows. The vertical networks dominated by large corporations give access to the knowledge that is important for innovation. Much small firm innovation tends to take place within vertical networks dominated by large corporations {{68 Bristow, G. 2005}}. In addition to those, the two other sub-indicators, *Broadband Internet subscriptions* and *Mobile broadband subscriptions*, are related to the importance of having access to the latest technologies and having the ability to absorb them, thus improving daily life and business activities.

The fourth determinant is *macroeconomic environment*, it refers to the existing conditions of the economy favouring business. Fiscal deficits and debts limit a government's capacity to provide services efficiently, and inflation rates affect the performance of firms and a country's economic growth. We saw in the analysis that Financial Services is the biggest and most powerful industrial sector, that it is the one enabling the functioning of other sectors. If the macroeconomic environment is unstable, financial risk becomes high, interest rates rise and doing business becomes difficult.

## 4.5.2. Relation between FDI originated in the South and Location Factors in the North

Next, a series of regression analyses were conducted to establish the factors that significantly contributed to attracting FDI to the North from the South.

The total number of South-North investments, and location factors for 52 countries in the North were analysed in the regression.

In the first analysis, the Global Competitive Index was used as a lone predictor of FDI. In the second analysis, all twelve competitive pillars were used as predictors of FDI. Finally, for those pillars which had a significant effect on FDI, additional analyses were conducted in which the sub-indicators for these pillars were used to estimate FDI. Below, the significant regression weights (B) have been reported together with the significance levels (\* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ ). For all analyses, the  $R^2$  was also reported.

Location factors determinant to attract FDI:

The first analysis pointed out that the Global Competitive Index is a statistically significant predictor for FDI inflows and showed a strong effect,  $B = 6.91^{***}$ .

Next, all twelve competitive pillars were included in a multiple regression. Only one of the pillars had statistically significant effects on FDI inflows: Market Size (for regression weights and significances, see below).

Finally, additional regression analyses to explore in more detail which sub-indicators contributed to the significant effects of this pillar were conducted. The results are reported below (with the significant sub-indicators indented below the corresponding pillar):

---

10 <sup>th</sup> Pillar:	Market Size:	$B = 3.69^{***}$
	Foreign market size index:	$B = 4.81^{***}$

---

The result shows that FDI attraction in the North is strongly related to a pillar belonging to economies in the second stage of development, i.e. efficiency driven economies.

Southern multinationals invest in the North with the aim of getting new markets for their products and services. However, the aim does not seem to be the market of the country they are investing in, as much as it is the opportunity that the specific country represents for getting access to other markets.

The North is the core of the global economic urban network; it has the best established business and finance hubs with connections all around the world. In addition, most of the top multinational companies' headquarters are clustered in strategic places in the North. Those factors represent valuable capital that Southern multinationals want to invest in. Such investments allow Southern multinationals to get strategic contacts and continue building their global network from within its existing structure.

Those arguments are in line with Glücker's and the Geographical Network Trajectory concept: place makes a difference and proximity affects network formation. In this globalized world, access

to foreign markets is achieved by getting access to the existing networks, because links are more likely to occur between already connected firms.

Multinationals from the South seemed to understand this; and thus are investing in having a presence in the North. In fact, Headquarters is the top economic activity in the South-North network.

## Chapter 5: Conclusions and Recommendations

The purpose of this study was to determine the current structure of the global South within the world system, and to determine the causes of the transformation of the global urban economic network. The study stressed the importance of carrying out empirical research that can give an account of perspectives on South–North and South–South relationships. Thus, it contributes to the development theory and urban models appropriate and particularly relevant to the global South.

In addition, given the pace of global market integration, it is important to understand the processes shaping the world economy and its consequences for different regions at different scales (e.g. the North, the global South, the different world regions, and the individual countries), in order to develop models and policies for regions that take into account their own position and role in broader structures.

The FDI investment trend analysis in this study showed that investments originating in the South grew twice fast than investments originating in the North. Furthermore, they continued growing even after the 2008 economic crisis. Though, those investments still represent a very small amount (8%) of total volume of investments worldwide, the outcome of this is that the global South's share in the global economic urban network is actually growing in strength and relevance, and as result the South-South and South-North links of the global economic urban network are rapidly strengthening. In the meantime the North continues to dominate over the global South.

In terms of the global South, the most dynamic region in attracting FDI was the Middle East. Nevertheless the Middle East is not the region attracting the most volume of FDI in the global South; its share of investments (4.5%) is far smaller than those of the Asia Pacific (24%). However, the Middle East portfolio of investors is more balanced. That makes the region more resilient now that investments from the North have slowed down as a consequence of the current economic crisis.

The two main economic sectors for the world as a whole were Business Services and Financial Services. The same two sectors were important for all investments originating in the South. However, a fundamental difference appears to be that while for the worldwide investments the two sectors presented similar volumes and growth patterns, for the investments that originated in the South, Financial Services quadrupled during the 10-year period covered by this study and left other sectors far behind, including Business Services. The volume of investments for Business Services remained relatively quite small in comparison. These findings support two assertions from theory. First, that of Das (2010) about the growing integration of emerging market economies into the global financial markets, contributing to financial globalization and benefitting from it. And second, from Sassen's (1991) ideas about how producer service companies' flows are key to determining the global network, since they provide the basic services necessary for any other further investment. Financial readiness, as indicated by the quadrupling of Financial Services, seems to be just the first indication of the global South entering a higher stage of development in other industrial sectors.

For the South-South network, the other main industrial sectors after Finance Services and Business Services, were Consumer Products, Textiles and Healthcare. This does not come as surprise, since the global South has, as Das (2010) has pointed out, important markets of its own, with large and growing middle classes, which are a source of value-conscious customers. In support of Das' statement, taking into account just the two biggest economies in the global South, it is estimated that already by 2020 there will be nearly 1 billion middle-class Chinese and Indians. They will represent the largest consumer market that has ever existed. In addition, because labour productivity in the global South is increasing and the countries are moving from rural agricultural economies to

industrial economies, the resulting higher economic growth will increase population purchasing power and demand for services.

When observing the main industrial sectors in the South-South network, it was interesting to verify the differences in scales at which different sectors operate. Finance Services and Business Services companies operate on a large geographical scale, across the global South. This is keeping with current theory. Service companies, as Sassen (1991) argues, function on a global scale, thanks to the development in communications that links local investment opportunities to global circuits. In contrast, leading global South's companies from the Consumer Products, Textiles and Healthcare sectors seemed to operate on a smaller geographical scale: either within the geographical region comprising North Africa, the Middle East and the Asia Pacific, or within the Latin American market. According to Scott (2001), in a globalizing world, city-regions (in our case country-regions) have competitive advantages for firms. As an example, leading global South's companies in Consumer Products, Textiles and Healthcare seemed to serve in geographical areas where their products are suitable to a vast consumer base sharing similar needs, tastes, and cultural backgrounds along with geographical proximity.

When observing the structure and geographical distribution of FDI flows in the South-South network, the findings revealed that the network had a strong hierarchical pattern. The central elements of the structure are India and the UAE, the biggest origins of FDI outflows. As Wall (2009) explains, "the importance of cities in a globalizing world is strongly associated with their hierarchical positions (centrality) in relation to other cities and the interdependencies (structure) that they exhibit with one another." In the case of the global South network, it was countries rather than cities that formed the important nodes. The strongest ties in the network were found between India and the UAE in both directions; the thicker tie was the one having the UAE as destination, meaning that India has the strongest control power in the network. Such intense reciprocal relations among core countries and the general connectivity that surrounds them correspond with Van Hamme and Pion's (2012) findings about the characteristics of global urban network cores.

There were two solid heterarchical patterns in the South-South network, those corresponding with the semi peripheries. The first, was a region constituted by the Asia Pacific and part of the Middle East. The second was within Latin America. The peripheries of the South-South network appear over vast parts of Africa, i.e. countries having few asymmetrical economic relations with a limited number of core countries, and not part of cohesive groups, as Van Hamme and Pion (2012) described them.

As final comment on the findings in this study about the structure of the global urban economic network in the global South, I would like to reflect back on the hypotheses posed in section 1.1.4 about the possible developments in the global urban economic network. The research findings point in the direction of my third hypothesis. I will rephrase it: the cores of the network being in the USA, Europe and Asian cities, with strong regional markets within Latin America and between the Middle East, North Africa and the Asia Pacific. Africa will possibly continue to connect to the Asia Pacific and the Middle East, but internally will continue being fragmented. I have to admit that I am more sceptical now than at the beginning of the research about the possibility of a thorough South-South integration. This is especially true when observing Latin America, which seems to be a unit of its own in the global South; it has its own firms, own market, own language and 70% of its FDI coming from within Latin America. This may be a result of the global South's regions having long developed apart from each other, and it will take a while before they find common paths in their network trajectories.



In terms of the top countries in the global South that attract FDI investments and their competitors, the findings showed that the country attracting the most FDI by volume and growth rate is Saudi Arabia. Saudi Arabia does not receive a big volume of investments (2% of total) but has an FDI growth rate of almost 20%. This growth rate can be explained by the fact that the Middle East countries are becoming strong regional players and get most of their FDI from the region (the Middle East, North of Africa and the Asia Pacific). Saudi Arabia's investment profile includes; Business Services (as the country's top strength), Financial Services, Hotels & Tourism, Real Estate, and Textiles. Saudi Arabia's main competitors are regional players: Turkey, Morocco and Qatar.

Other top countries in the global South in terms of volume of attracting FDI investments are China and India. China is an exceptional case because it is infinitely more powerful than any other country in the region in terms of attracting FDI, but it has a negative growth rate. On the other hand China's investment portfolio is exceptionally well balanced compared to others, as it attracts similar volumes of investment in all its main 5 industrial sectors. China and India have similar investment portfolios and almost the same competitors, among them the UAE and Brazil. It is interesting to note that India is a competitor for China, but China is not a competitor for India. India excels over China in only one sector, Software & IT Services.

India and the UAE have exactly the same investment portfolios in the top 5 sectors: Business Services, Communications, Financial Services, Industrial Machinery and Equipment and Software & IT Services. India's competitors are to be found in the regional core countries of the UAE, Brazil and Mexico. In contrast, the majority of the UAE's competitors seemed to be found in a lower hierarchy rank of countries: Vietnam, Brazil and Malaysia. The UAE excels over its competitors in Business Services and Financial Services. Going lower down the rank of global South countries attracting FDI investments we find that the regional core countries, Brazil and Mexico are competitors and they also compete with Malaysia and Vietnam or Thailand. At this level, investment portfolios include more basic industrial sectors such as Metals instead of Communications. South Africa is still lower down the rank and competes with Argentina, Chile and Colombia. Again, the investment portfolio is different than for higher rank countries, and in addition to Metals, Food & Tobacco is an important sector, instead of Industrial Machinery, and Equipment & Tools.

All the top countries studied share a feature in common in, their investment portfolio of economic activities. Their portfolios contain: Business Services, Customer Contact Centre, Design Development & Testing, Headquarters, and Sales, Marketing & Support. Furthermore, the patterns of the portfolios are quite similar, with Business Services and Sales, Marketing & Support as the biggest activities for all countries. Reflecting on the fact that all these countries are the best FDI attractors in the region, it would be reasonable to think that the biggest number of investments would go to those activities that enable the seamless performance of the industrial sectors. Additionally, the particularly big number of investments in these activities could also be explained by the fact that those countries have also become important business hubs in their region. As exception to the rule, again placing China and India at a different level, is the fact that China and India have in their portfolios strong Design, Testing & Development activity. This remind of Boschma's (2004) theory where he argues that regions' specific advantages are constructed assets, and regions depend on the ability to constantly upgrade their economic base to keep their competitiveness and unique value for firms. Key to the necessary constant upgrading of their economies would be Design, Testing & Development activity.

This study has also proved which location factors are key for attracting FDI investment to the global South and to the North from the global South.

For attracting FDI investments to the global South, the key location factors were four: Domestic Market Size, Innovation, Technological Readiness, and Macroeconomic Environment. With regard to the first factor, Domestic Market Size, we have already discussed the huge market opportunity the global South represents. But, additionally to the Domestic Market Size, another important factor is exports as a percentage of GDP. Exports are facilitated by communication infrastructure, existing networks, and proximity, but more importantly by a governmental policy framework facilitating exports and minimising trade barriers. The second key factor is Innovation, comprising the capacity for innovation, the availability of scientists and engineers and PCT patent applications. All of those are outcomes of a region's created assets (education, industrial clustering, networking) as Dunning (1998) has described them. The third factor is Technological Readiness, comprised of FDI and technology transfer, Broadband Internet subscriptions, and Mobile broadband subscriptions. This means that the country is already part of the global urban network with multinationals investing in their territories and bringing new knowledge and innovation through their vertical networks, as Bristow (2005) indicates. Additionally, it means that the latest technologies are available in the country and the population and entrepreneurs have access and incorporate them in daily life activities. The last factor, key to FDI attraction, is the Macroeconomic Environment, comprised of Country Credit Rating, Inflation, and General Government Debt. In short, investments depend on whether or not the economy of a country favours business, and at what risk.

From the list of location factors important for FDI attraction to the global South, it is clear that what is required from the region is much more nowadays than to provide raw material or cheap labour. FDI attraction is now highly linked with economies in a more development stage. In addition, as Flint (1996) argues, globalization has enhanced the interaction of state specific and global structures to bring outcomes that are context-specific. Meaning that national state of affairs (local policies, economic and social conditions, politics, etc.) matter to FDI attraction, and even become an opportunity to become part of the global structures. In addition, the benefits of the interaction between national and global will be rewarded by prosperity in the region's.

The key location factor for FDI attraction in the North for investments from the global South, was also Market Size. The difference was that the relevant sub-indicator appeared to be the Foreign Market Size index. Apparently when Southern multinationals invest in the North, their aim is not the market of the country they are investing in, but the opportunity that the specific country represents to get access to further markets. Since the North is the core of the global economic urban network, it has the best established business and finance hubs with connections all around the world. Those are strategic factors for new firms who want to have access to foreign markets. This argument is in line with Glücker and his Geographical Network Trajectory concept. Especially his observations that place makes a difference and proximity affects network formation. The first step to getting access to foreign markets is to get access to a node around which existing networks are linked and managed. Investment locations of top companies in the South-North network seem to support this theory; these companies have invested in business hubs such as Hong-Kong, Singapore, Switzerland, the UK, and the USA.

Finally, has my research contributed anything new to our understanding of the global urban economic network? I would argue that it has. It has first of all added to a growing body of the literature about the global South. Second, it has indicated what the position of the global South countries is in the global urban economic network, giving an indication of their strengths and connections. Third, it has made it clear from the results presented that the global South is growing in importance in the global urban network, even though the relation structures with the North are

still very hierarchical, with the North as the dominant partner. At the regional level, the South-South network exhibits a combination of hierarchical and heterarchical structures which on the whole lack integration. As for the South-North network, the process seems to be still unfolding. At present the regional core countries from each global South region still lead and almost monopolize the process.

The results presented posit new challenges for the future development of the global South. This study can be considered as a baseline, as a guide to understanding the development of the region as a whole, and its place in the global system. Additionally, the data used allowed a comprehensive empirical analysis of the region. And in fact, the data set and methodology used could be used for a much deeper study of the networks, at the city and firm levels. The deeper concrete knowledge that would result from such further study would provide a valuable set of tools that could be used when planning the development framework of specific regions. Further studies in this direction could be done.

At this point, I would like to refer back to the introduction where the challenges of the expansion in the South-South market were discussed. The challenges mentioned were: “that the global South is the least integrated region in terms of infrastructure, trade, capital and knowledge exchange”. After completing this study, I have arrived at the conclusion that the most important challenge to overcome is the lack of knowledge that the region itself has about the global South, a lack of knowledge that limits its awareness about its own possibilities. Only after a common body of knowledge about the global South is shared within the region, can it be used by politicians, policy makers, urban managers, and entrepreneurs to build strategies, policies and businesses that can better profit from the possibilities of the region. After that, all other challenges can be overcome.

Recommendations for urban management derived from the lessons gotten from this study are the following.

The development of plans that will effectively add to the sustainable development of specific regions and cities, are plans that will contribute to the existing structures of the place by enhancing its strengths, and finding solutions to its weaknesses. To achieve this, it is not enough to know the place in isolation, since its economy depends on its performance at the local, regional and global levels. Additionally, it is important to know the investment portfolio of the place, to get to know which industries the place is good at, who its competitors are, how it performs in comparison with them and what room there is for complementarity. Finally, the challenge will be to identify the local factors (tangible and intangible) contributing to the place’s strengths and weaknesses, to develop an appropriate set of measures or plans that cannot only tackle identified local problems and deficiencies, but can also built on the opportunities and strengths that already exist. A good understanding of the global urban economic system structure, plus an understanding of the competition and the possibilities for complementarities, will lead to more accurate and resource conscious urban planning, management and policy making.

In other words, a type of analysis like the one presented in this study and developed in more detail could constitute an essential tool for urban managers. With such a tool, the urban manager could obtain an accurate account of the forces shaping the cities/regions. Only by having thorough information about the places of intervention can urban managers and planners develop better models of urban planning.

## Bibliography

- Athukorala, P., 2009. Trends and Patterns of Foreign Direct Investments in Asia : A Comparative Perspective. *The Journal of Applied Economic Research*, (3 : 4), pp. 365–408. Available at: <http://mar.sagepub.com/content/3/4/365> [Accessed 22.04.2013].
- Boschma, R., 2004. Competitiveness of Regions from an Evolutionary Perspective. *Regional Studies*, (38:9), pp. 1001-1014. Available at: <http://dx.doi.org/10.1080/0034340042000292601> [Accessed 22.04.2013].
- Brandt, W., 1980. North-South: A Programme for Survival. . London: Pan.
- Bristow, G., 2005. Everyone's a 'winner': problematising the discourse of regional competitiveness. *Journal of Economic Geography*, (5), pp. 285–304.
- cargocollective.com, 2012. Brandt Line. Available at: <http://cargocollective.com/bradsimantel/Brandt-Line> [Accessed 2013].
- Castells, M., 1996. The rise of the network society. Cambridge: Blackwell.
- Das, D. K., 2010. Contours of Deepening Financial Globalization in the Emerging Market Economies. *Global Journal of Emerging Market Economies*, (2: 45), pp. 45-67. Available at: <http://eme.sagepub.com/content/2/1/45> [Accessed 22.04.2013].
- Dicken, P., 2011. Global Shift Mapping the Changing Contours of the World Economy. 6th. New York: The Guilford Press. Available at: [http://www.guilford.com/cgi-bin/cartscript.cgi?page=pr/dicken.htm&sec=summary&dir=geo/geo\\_econ](http://www.guilford.com/cgi-bin/cartscript.cgi?page=pr/dicken.htm&sec=summary&dir=geo/geo_econ) [Accessed 22.04.2013].
- Division of International Trade and Integration of ECLAC, 2009. Latin America and the Caribbean in the World Economy. *Annual Report*, pp. 07.11.2012. Available at: [http://www.eclac.org/publicaciones/xml/6/40696/crisis\\_generated\\_in\\_the\\_centre\\_and\\_a\\_recovery\\_driven\\_by\\_the\\_emerging\\_economies.pdf](http://www.eclac.org/publicaciones/xml/6/40696/crisis_generated_in_the_centre_and_a_recovery_driven_by_the_emerging_economies.pdf) [Accessed 17.12.2012].
- Dunning, J. H., 1998. Location and the Multinational Enterprise: A Neglected Factor? *Journal of International Business Studies*, (29), pp. 45-66.
- Economist, 14.08.2008. Urban Competitiveness. (August), pp. 8.11.2012. Available at: <http://www.economist.com/node/11921457> [Accessed 8.11.2012].
- Financial Times Ltd., 2013. fDiMarkets.com. Available at: <http://www.fdimarkets.com/faqs/> [Accessed 2013].
- FLINT, C. and Shelley, F. M. 1996. Structure, agency, and context: the contributions of geography to world-systems analysis . *Sociological Inquiry*, 66 (4), pp. 496-508.
- Glückler, J., 2007. Economic Geography and the evolution of networks. *Journal of Economic Geography*, (7), pp. 619–634. [Accessed 22.04.2013].

- Goldman Sach's Global Economics, 2010. Facts about China: ECONOMY & GDP 2011-2012. *China Mike*, (Dec), Available at: <http://www.china-mike.com/facts-about-china/economy-investment-business-statistics/> [Accessed 16.12.2012].
- Hall, P., 1966. *The World Cities*. London: Weidenfeld and Nicolson.
- Hopkins, T., Wallerstein and Et al eds., 1998. *The Age of Transition*. Second. Australia: Pluto Press.
- King, S., 2011. *The Southern Silk Road*. London: HSBC. Available at: <http://www.research.hsbc.com/midas/Res/RDV?p=pdf&key=WZnyWSIf38&n=299714.PDF> [Accessed 8.11.2012].
- Murphy, J. T., 2008. Economic Geographies of the Global South: Missed Opportunities and Promising Intersections with Development Studies. *Geography Compass*, (2/3), pp. 851–873. Available at: <http://onlinelibrary.wiley.com/doi/10.1111/j.1749-8198.2008.00119.x/citedby> [Accessed 16.04.2013].
- Reuters, Southeast Asia's solid economic growth rides over global woes. (June), pp. 30.11.2012. Available at: <http://uk.reuters.com/article/2012/06/01/uk-seasia-economy-idUKBRE85009U20120601> .
- Sassen, S., 1991. *The global city: New York, London, Tokyo*. Princeton University Press.
- Schwab, K. and World Economic Forum, 2012. *The Global Competitiveness Report 2012–2013*. Geneva: World Economic Forum within the framework of The Global Benchmarking Network. [Accessed 10.06.2013].
- Scott, A. J., 2001. Globalization and the Rise of City-regions. *European Planning Studies*, 9 (7), pp. 813-826. [Accessed 22.04.2013].
- Surborg, B., 2011. World Cities Are Just “Basing Points for Capital”: Interacting with the World City from the Global South. *Urban Forum*, [Accessed 22.11.2012].
- Taylor, M. and Oinas, P., 2006. *Understanding the Firm Spatial and Organizational Dimensions*. Oxford: OXFORD University Press.
- Teunissen, J. J. and Akkerman, A. ed., 2005. *Africa in the World Economy*. The Hague: FONDAD.
- The Financial Times Ltd, 2013. *The fDi report 2013*.
- United Nations, Department of Economic and Social Affairs, Population Division, 2011. *World Population Prospects: The 2010 Revision*. Available at: <http://www.un.org/en/development/desa/population/> [Accessed 2012].
- Van Hamme, G. and Pion, G. 2012. The Relevance of the World-System approach in the Era of Globalization of Economic Flows and Networks. *Geografiska Annaler: Series B, (Human Geography 94)*, pp. 65-82. Available at: <http://onlinelibrary.wiley.com/doi/10.1111/j.1468-0467.2012.00396.x/pdf> [Accessed 24.05.2013].

- Wall Street Journal, 25.04.2012. IMF Sees Latin America Economic Growth Rising; Risks Remain. *WSJ*, (April), pp. 8.11.2012. Available at: <http://online.wsj.com/article/SB10001424052702304723304577366110557994858.html> [Accessed 07.11.2012].
- Wall, R., 2009. NETSCAPE Cities and Global Corporate Networks. PhD. Rotterdam School of Management (RSM): Erasmus Research Institute of Management – ERIM.
- Wall, R., 2011. Sectoral Differentiation and Network Structure Within Contemporary Worldwide Corporate Networks. *Economic Geography*, pp. 267-- 308. [Accessed 30.10.2012].
- Wall, R., 2012. Reboot. 30 pp. 70- 73.
- Wall, R.S. and Burger, M., 2012. Research report: De Strijd om Kapitaal. Den Haag: Province of South-Holland.
- World Bank, October 4, 2012. Despite Global Slowdown, African Economies Growing Strongly—New Oil, Gas, and Mineral Wealth an Opportunity for Inclusive Development. October pp. 30.11.2012. Available at: <http://www.worldbank.org/en/news/2012/10/04/despite-global-slowdown-african-economies-growing-strongly-world-bank-urges-countries-spend-new-oil-gas-mineral-wealth-wisely> [Accessed 30.11.2012].

## Annex 1: Top FDI Origins and Destinations

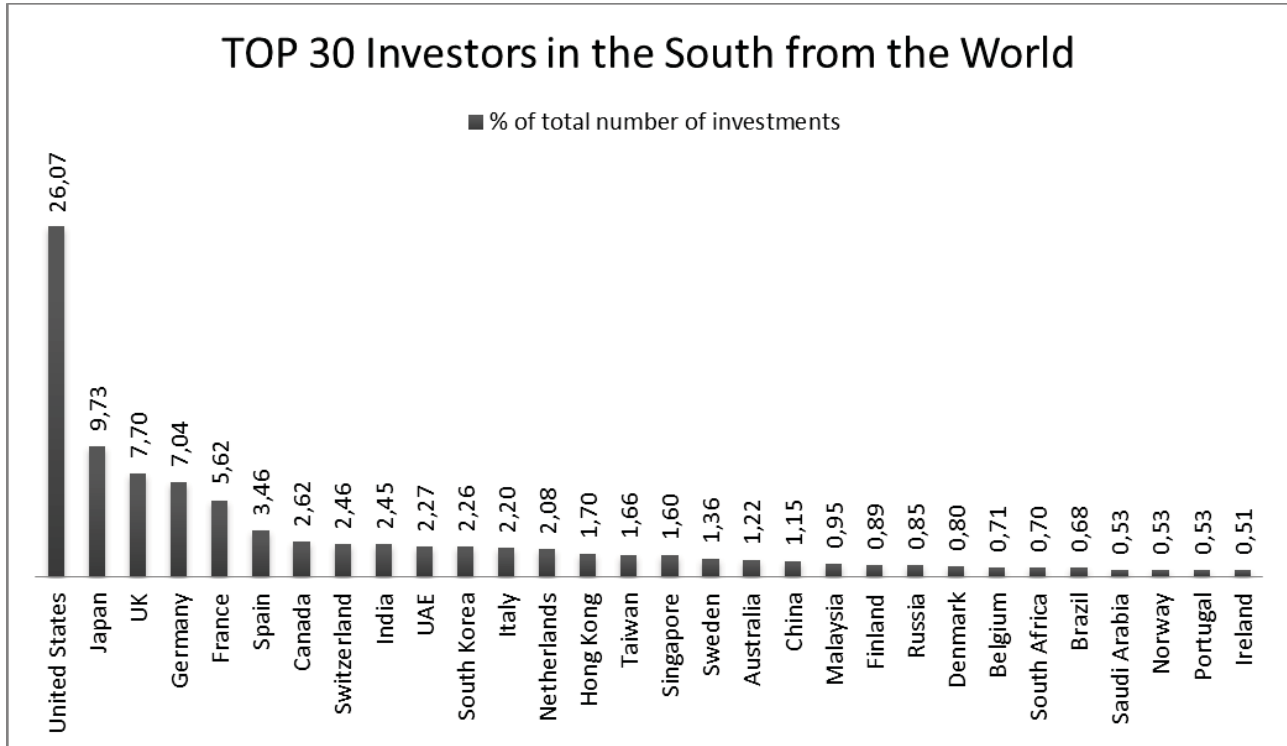


Figure 35: Top FDI investors in the global South from the world by number of investments

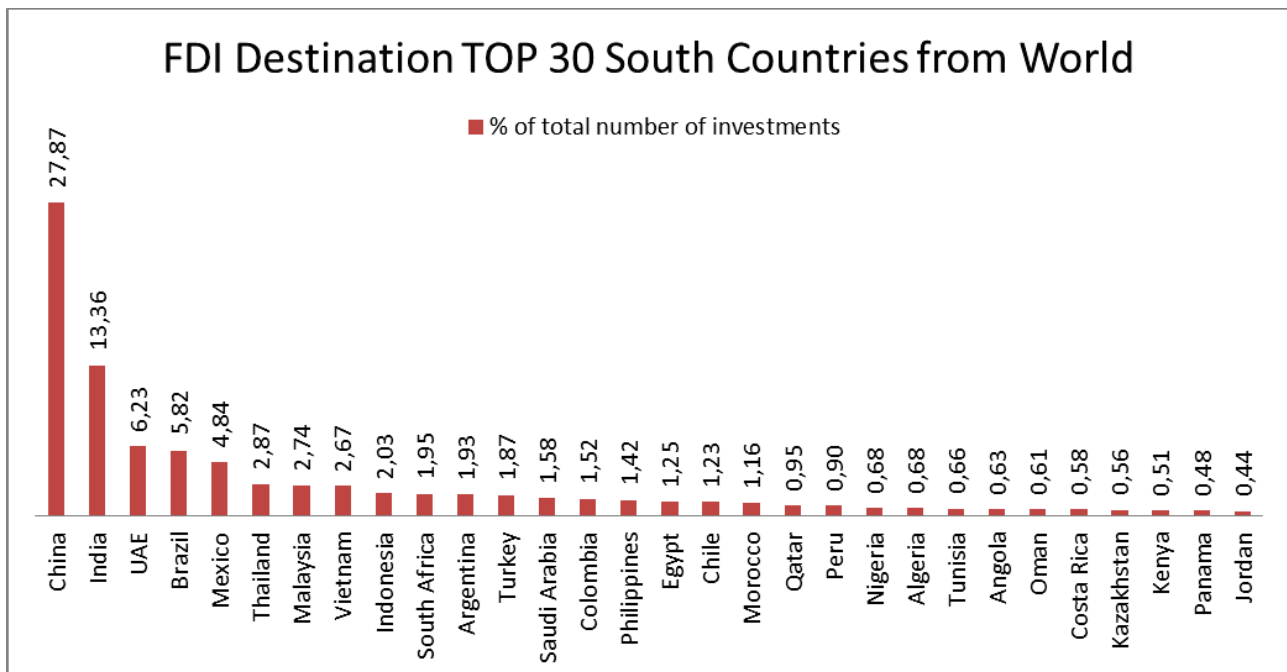


Figure 36: Top FDI destinations in the global South from the world by number of investments

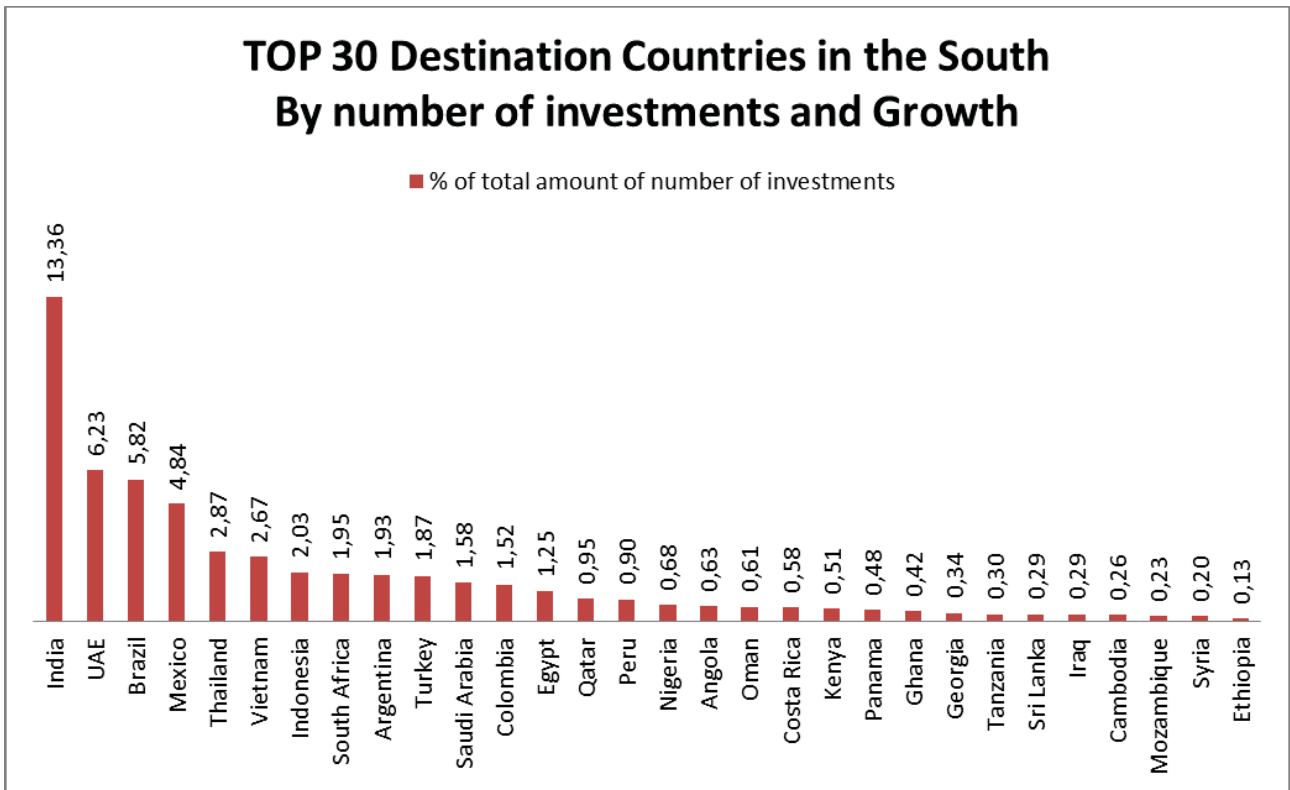


Figure 37: Top FDI destinations in the global South from the world by number of investments and growth



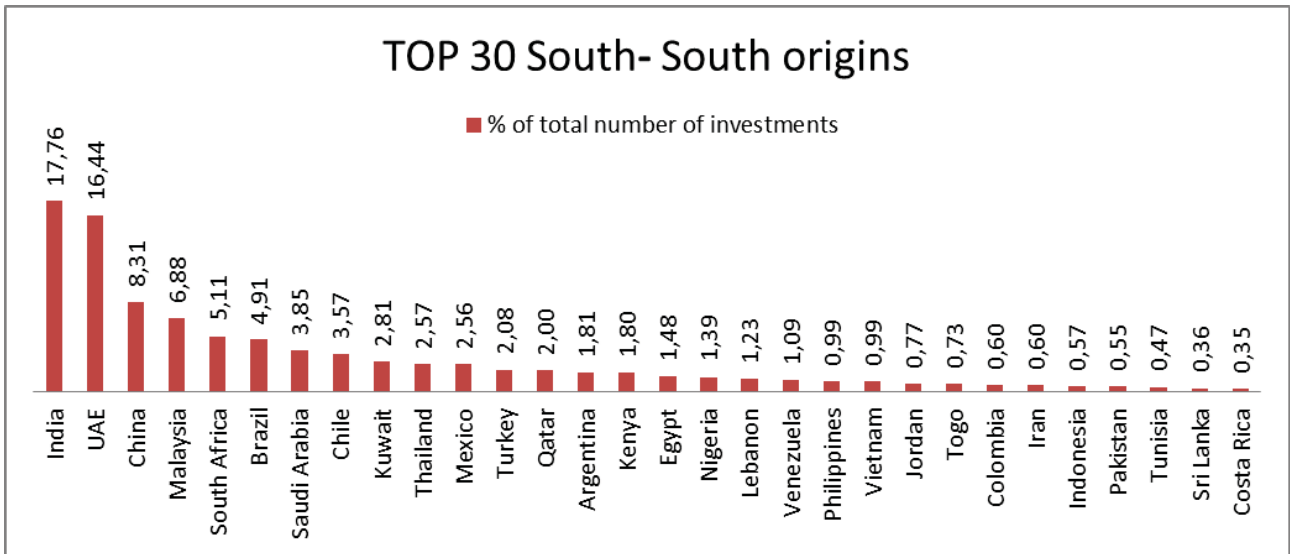


Figure 38: Top FDI Investors in the South from the South

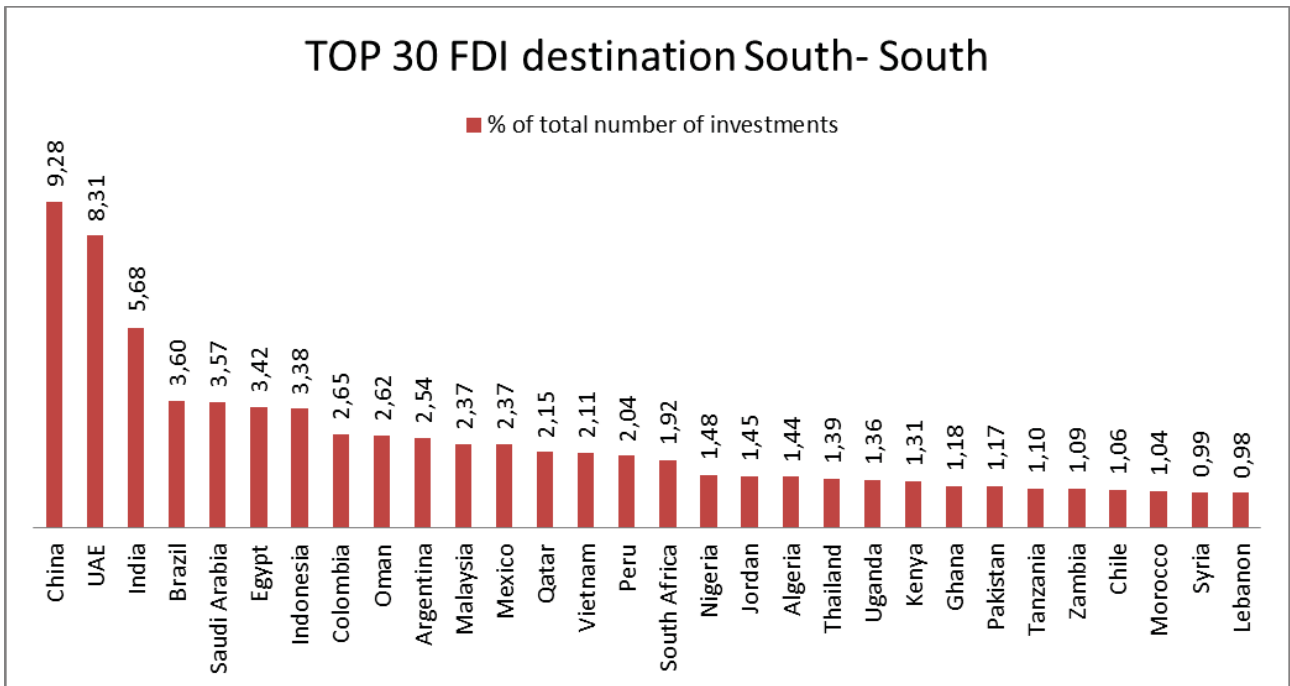


Figure 39: Top FDI Destinations in the South from the South

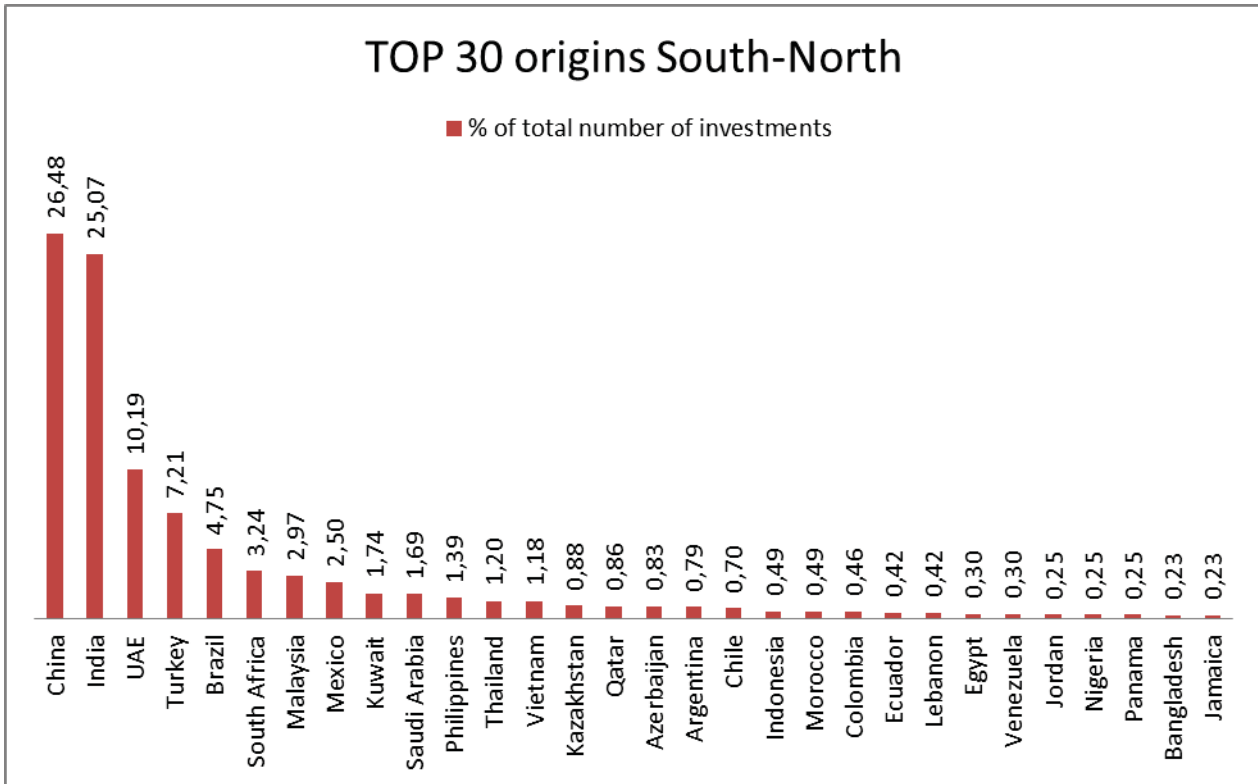


Figure 40: Top FDI Investors in the North from the South

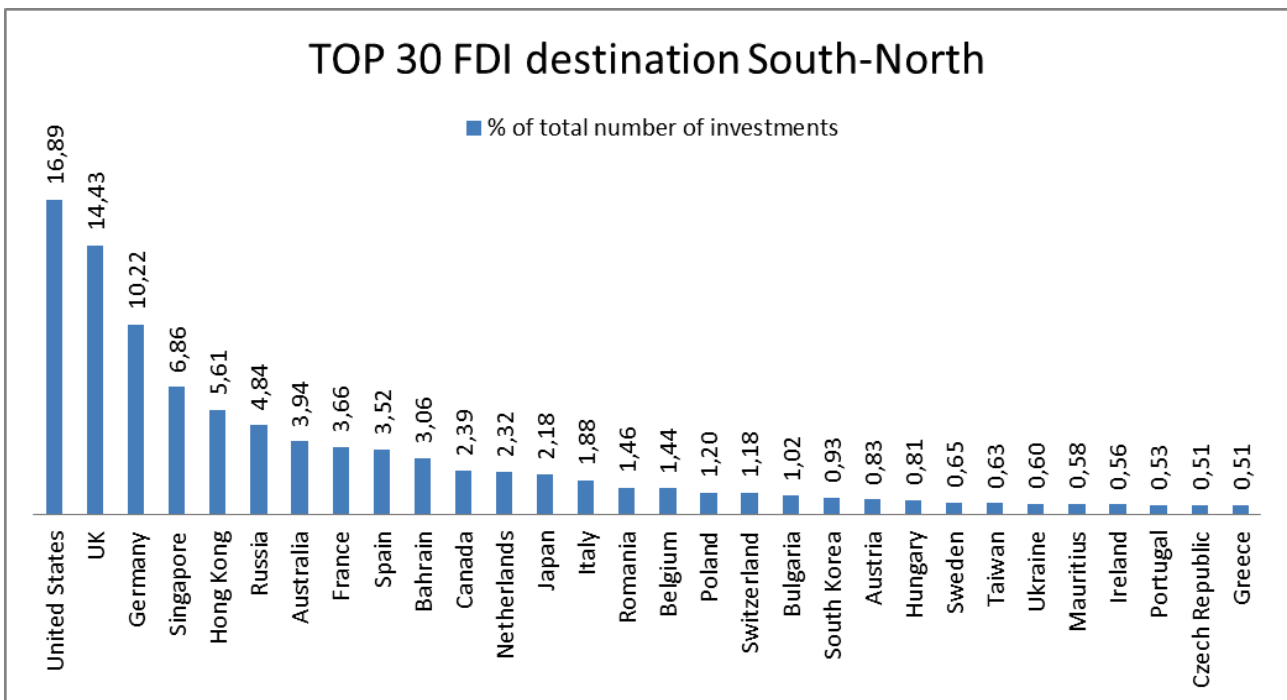
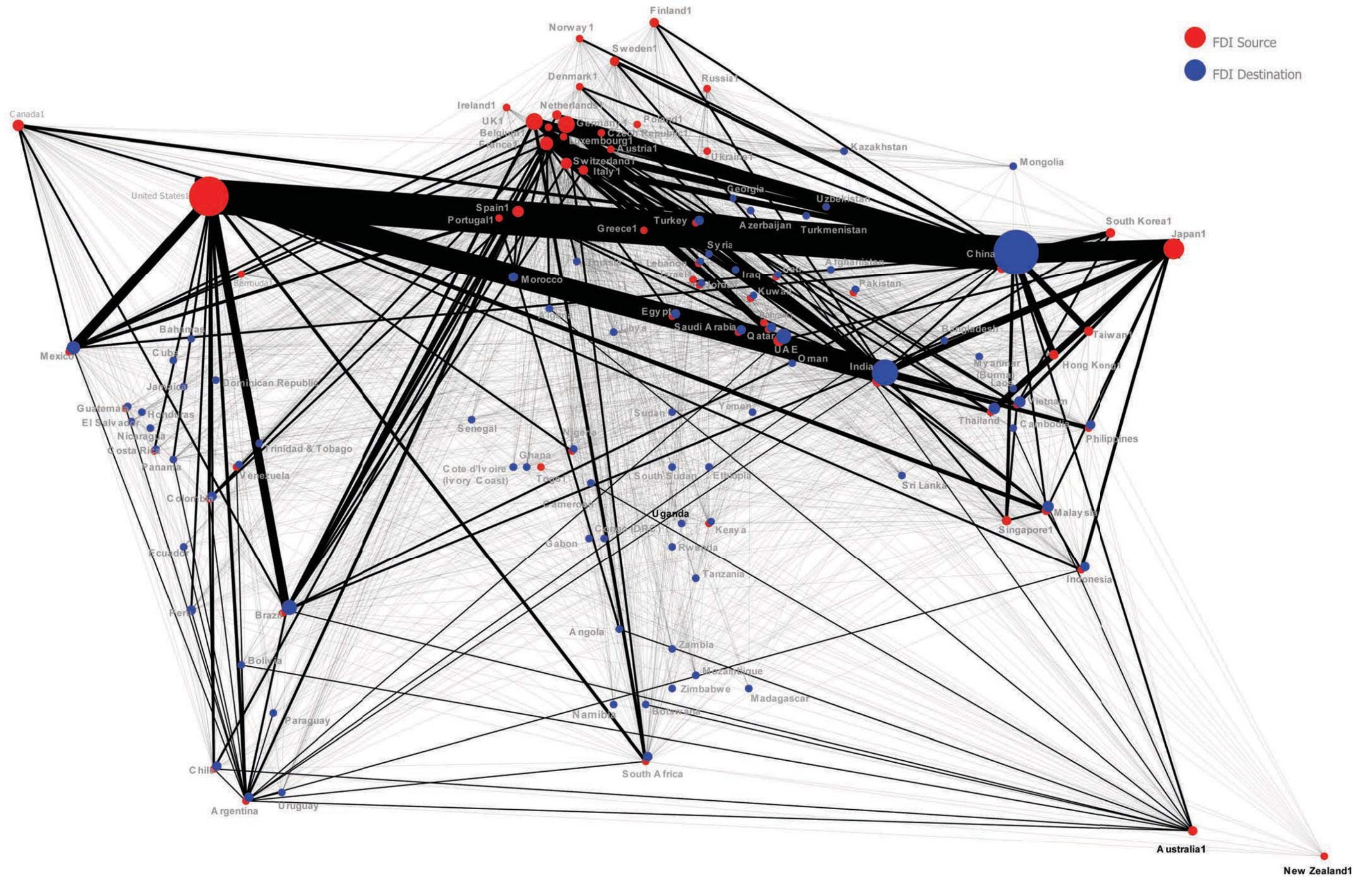
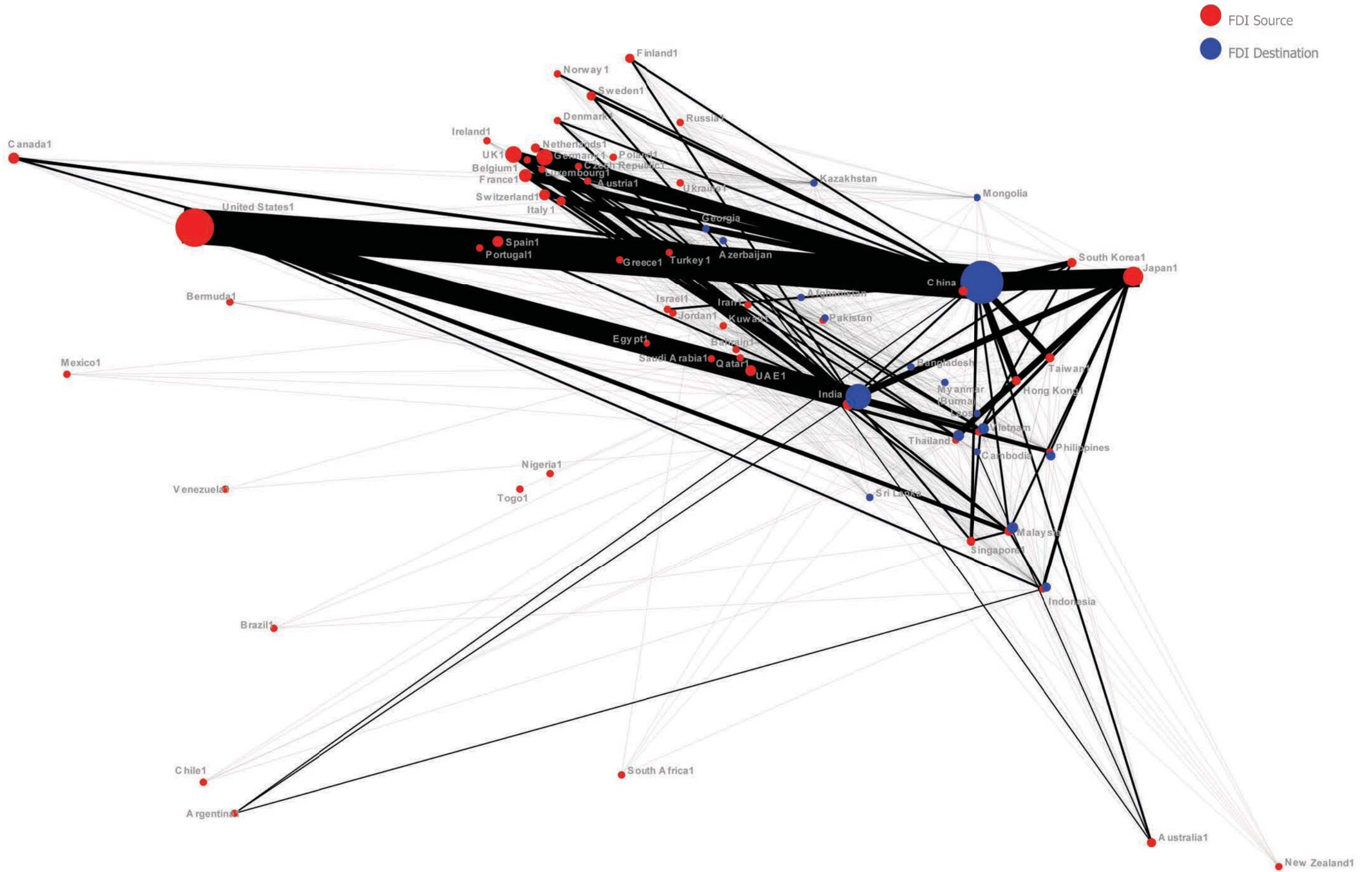


Figure 41: Top FDI Destinations in the North from the South

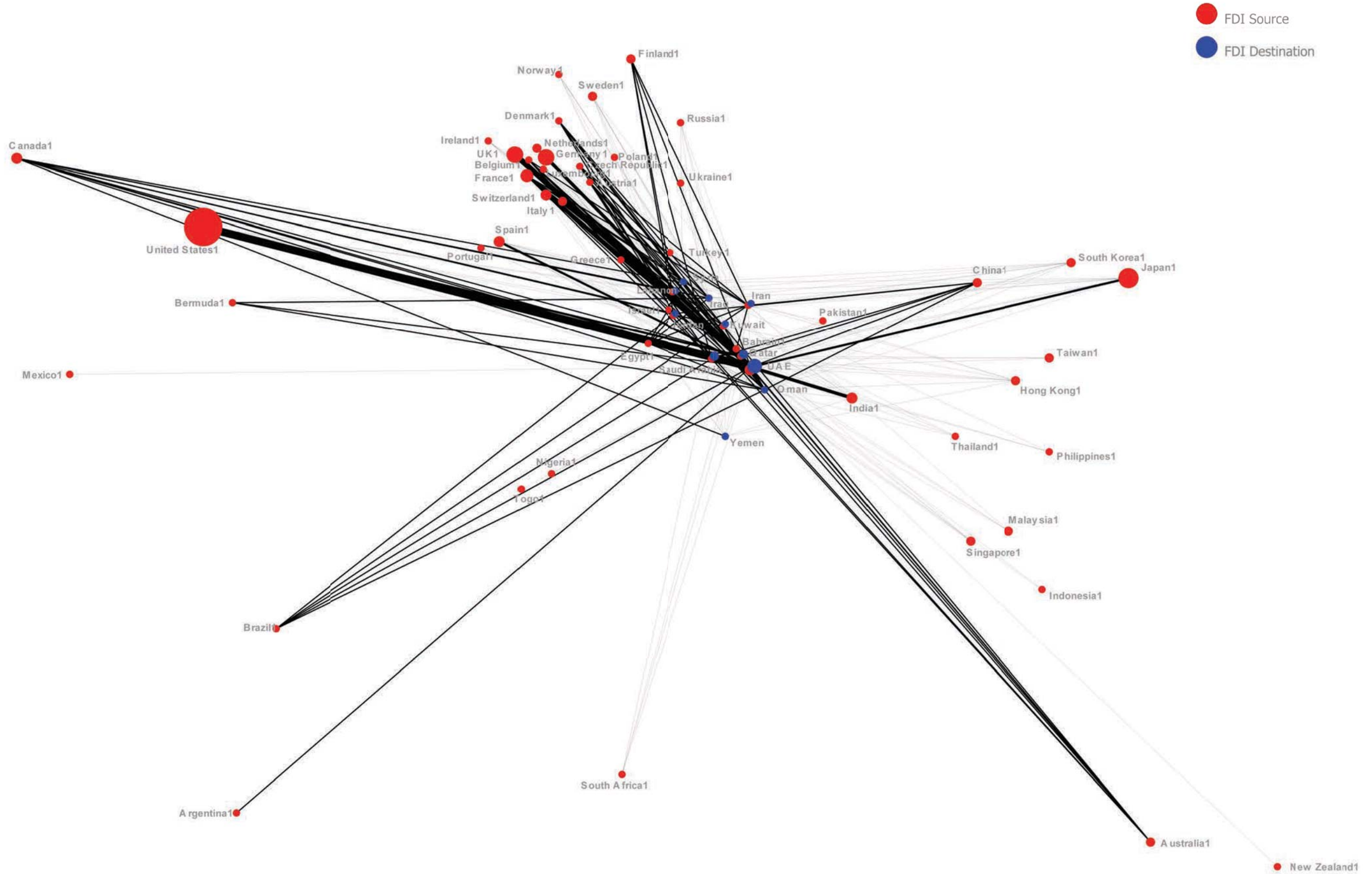
## Annex 2: Network: Total FDI Destination South



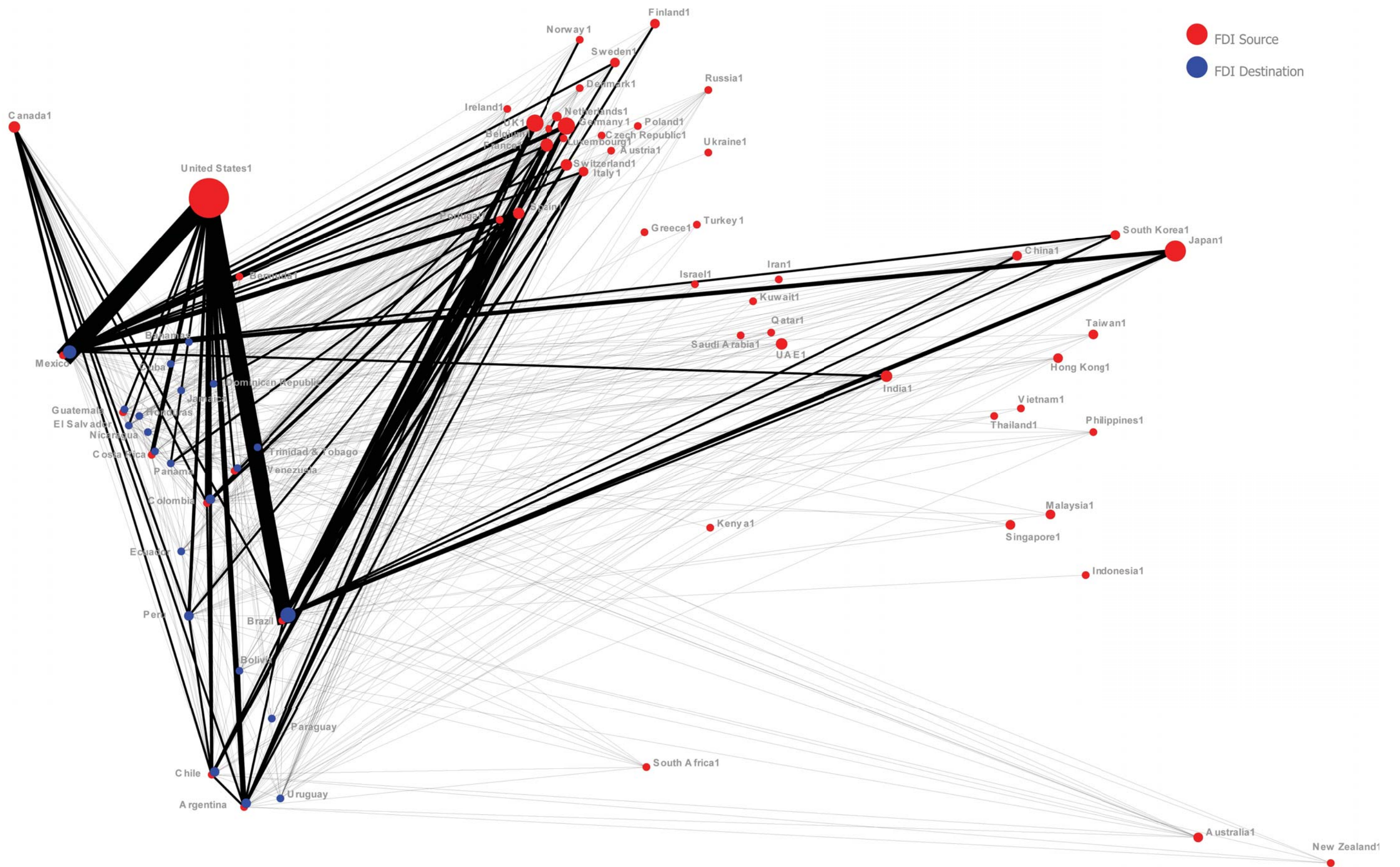
### Annex 3: Network: Total FDI Destination Asia Pacific



# Annex 4: Network: Total FDI destination Middle East



## Annex 5: Network: Total FDI Destination Latin America



## Annex 6: Network: Total FDI Destination Africa

