جامعة القاهرة
كلية الإقتصاد والعلوم السياسية

الإستثمار الأوروبي المباشر ونقل التكنولوجيا الي مصر

رسالة لنيل درجة الماجستير في الدراسات الأوروبية المتوسطية

إعداد

إيرين مريم خليل جورج

إشراف

أ.د. علا الخواجة
أستاذ بقسم الإقتصاد
كلية الإقتصاد والعلوم السياسية

القاهرة - ٢٠٠٩

الإسم: إيرين مريم خليل جورج عفت الجنسية: مصرية
تاريخ وجهة الميلاد: ١٩٨٤/٣/٢٦ لندن
الدرجة: الماجستير في الدراسات الأوروبية المتوسطية
التخصص: الدراسات الأوروبية المتوسطية
المشرف: أ.د. علا الخواجة
عنوان الرسالة: الإستثمار الأوروبي المباشر ونقل التكنولوجيا الي مصر

ملخص الرسالة:

تزايد السكان وندرة الموارد بالاضافة الي حدة المنافسة العالمية كلها عوامل تدعو مصر الي الاسراع بجهود التنمية. احدي أهم عوامل النمو هي النهوض بتكنولوجيا الصناعة من خلال السعي لجذب الاستثمارات الأجنبية.

يعتبر الأتحاد الأوروبي الشريك التجاري الاول لمصر وقامت عملية برشلونة وسياسة الجوار بدعم العلاقات الاقتصادية بين الطرفين. الأتحاد الأوروبي هو أيضا من أكبر المستثمرين في مصر ومن هنا تكتسب دراسة الاستثمارات الأوروبية في مصر أهمية خاصة.

يعتزم هذه البحث دراسة أهمية الإستثمار الأجنبي المباشر كمصدر لنقل التكنولوجيا الحديثة وأثر الاستثمارات الأوروبية علي نقل التكنولوجيا المتطورة.

يتناول البحث التعريف بالمفهومين الاستثمار الأجنبي المباشر ونقل التكنولوجيا الدولية وأهم خصائصهما وكيفية انتقال التكنولوجيا الدولية من خلال الاستثمار الأجنبي المباشر.
كما يتناول البحث دراسة تطبيقية علي مصر تهدف الي دراسة الإستثمارات الأوروبية المباشرة في مصر ونقل التكنولوجيات الأوروبية من خلال دراسة واستبيان أهم الشركات الاوروبية العاملة في مصر في مجالات مختلفة.

إشراف

أ.د. علا الخواجة

Name:	Irene Mariam Khalil George Effat
Nationality:	Egyptian
Date and Place of Birth:	26/03/1984 London
Degree:	Masters in Euro Mediterranean Studies
Specification:	Euro Mediterranean Studies
Supervisor:	Prof. Dr. Ola Khawaga
Title of Thesis:	European Foreign Direct Investment (FDI) and International Technology Transfer to Egypt

Summary:

Growing population, scarce resources and increasing global competition are all challenges Egypt has to face to day to secure future generations.
The foreign direct investment constitutes one of the important factors to realize economic growth in Egypt.

The EU is Egypt's major trading partner and cooperation between both sides has been strengthened through the Barcelona Process and the Neighborhood Policy.
The EU is also one of the largest investors in Egypt and hence it is of great importance to analyze the structure of the European FDI in Egypt.

The paper aims at recognizing and analyzing International Technology Transfer (ITT) through European FDI to Egypt, and how far can technology transfer improve Egypt's economic performance:
Accordingly, this paper will look closer at the ITT components and will analyze nature, forms and determinants of ITT.
The actual technological impact of European FDI in Egypt will be analyzed through the study of some European companies in Egypt.

Supervisor

Prof. Dr. Ola El Khawaga

مستخلص الرسالة:

تسعي الدول المتقدمة والنامية علي حد سواء إلي جذب الإستثمارات الأجنبية المباشرة لما لها من أثر إيجابي علي اقتصادياتها خاصة في ظل العولمة وحرية حركة عوامل الانتاج.
مع تزايد أهمية التكنولوجيا كعامل حيوى للقدرة التنافسية فى الإقتصاد العالمى، صار انتقال التكنولوجيا بين الشركات، من خلال الإستثمار الأجنبى المباشر، هو القناة الرئيسية لإنتقال التكنولوجيا الدولية، فإن الإستثمار الأجنبى المباشر يقدم وفورات تكنولوجية هامة فى الاقتصادات المضيفة، خاصة إذا ما جاء فى شكل مشروع مشترك يخضع للسيطرة المحلية .إلا إنه للأسف، ونظراً للحاجة الملحة للتمويل الرأسمالى و/أو غياب السياسات الوطنية الملائمة فى مجال التكنولوجيا، تقوم معظم الاقتصادات النامية المضيفة بالتركيز على تعظيم حجم تدفق الإستثمار الأجنبى المباشر لديها، مع التقليل من أهمية جودة التكنولوجيات المنقولة من خلال الإستثمار الأجنبى المباشر .ومع ذلك، فقد صارت التكنولوجيا التى تحظى بالقدرة على المنافسة، شرطاً أساسياً للتنمية الإقتصادية والنمو .ويجب على الدول النامية، مثل مصر، أن تسعى لتحقيق أفضل المكاسب التكنولوجية الممكنة من الإستثمار الأجنبى المباشر.

الكلمات الدالة:

الإستثمار الأجنبى المباشر

الإستثمارات الأوروبية

انتقال التكنولوجيا

إشراف

أ.د. علا الخواجة

Abstract:

Both the developed and the developing countries struggle nowadays to strengthen their attractiveness towards foreign direct investment (FDI). This has become a new imperative for each country's policy in conditions of globalization and internationalization of the world economy what is followed by free movement of production factors.

The FDI inflows have an overall positive impact on country's development process and economic growth as well as, specifically important for the Mediterranean Partnership Countries (MPCs); they create jobs and accelerate exports. For all these reasons the competition between the countries and the regions in the attracting of the FDI becomes more and more intense.
FDI can have important technological spillovers in host economies, especially if it takes a joint-venture form subject to local control.

Unfortunately, due to dire need for capital finance and/or absence of appropriate national technology policies, most host developing countries focus on maximizing the quantity of their FDI inflow, while underestimating the importance of the quality of technologies transferred through FDI. However, competitive technology has become a basic prerequisite for economic development and growth, and developing countries such as Egypt should try to achieve the best possible technological gains from FDI.

Keywords:

Foreign Direct Investment

European Investment

International Technology Transfer

Supervisor

Prof. Dr. Ola El Khawaga

Cairo University
Faculty of Economics and Political Science

European Foreign Direct Investment (FDI) and International Technology Transfer to Egypt

Master's Degree in Euro-Mediterranean Studies

By Irene Mariam Khalil George Effat

Under the supervision of

Prof. Dr. Ola El Khawaga

Professor of Economics

Faculty of Economics and Political Science

Cairo 2009

ACKNOWLEDGMENT

This thesis is the result of two years of work whereby I have been accompanied and supported by many people.

I am deeply indebted to my supervisor, Dr. Ola El Khawaga, for her guidance, insight and encouragement throughout the preparation of this thesis and for her careful reading of and constructive criticisms and suggestions on drafts of this thesis.

I would also like to thank Dr. Mona El Garf for her helpful comments on the questionnaire of the thesis.

I would like to thank the numerous companies for their input in the questionnaire and whose valuable comments have contributed to the clarification of many of the ideas presented in this thesis.

I owe thanks to my work colleagues and friends for their support and friendship.

Finally, I would like to give my special thanks to my family for their encouragement and patient love which enabled me to complete this work.

My deep gratitude goes to God for all the gifts and opportunities.

TABLE OF CONTENTS

LIST OF TABLES AND FIGURES

TABLES

FIGURES

ABBREVIATIONS

AHDR	Arab Human Development Report
EDB	Economic Development Board in Malaysia
ETTICs	Egypt Technology Transfer and Innovation Centers
EU	European Union
FDI	Foreign Direct Investment
GAFI	General Authority for Investment and Free Zones
GDP	Gross Domestic Product
HACCP	Hazard Analysis and Critical Control Points
IDA	Industrial Development Authority
IMC	Industrial Modernization Center
IPR	Intellectual Property Right
ITT	International Technology Transfer
JV	Joint Venture
M&A	Merger & Acquisition
MHESR	Ministry of Higher Education and Scientific Research
MNC	Multinational Corporation
NIS	National Innovation System
OECD	Organization for Economic Co-operation and Development
R&D	Research and Development
S&T	Science and Technology
SHE	Safety, Health and Environment
SMEs	Small and Medium Enterprises
TFP	Total Factor Productivity
TRIMs	Trade Related Investment Measures
TRIPS	Trade Related Aspects of Intellectual Property Rights
UNCTAD	United Nations Conference on Trade and Development
UNIDO	United Nations Industrial Development Organization
WIPO	World Intellectual Property Organization

Introduction

The global economy has been transformed in recent years by the fall of international barriers to the flow of goods, services, capital and labor, and a marked acceleration in the pace of technological and scientific progress. Technological advances have created new opportunities for businesses against the background of an increasingly complex global economy, while reductions in the cost of transport and communication are making location less important, spurring companies to move operations to lower cost environments.

The principal channels by which countries are exposed to external technology—which include trade, foreign direct investment (FDI), and a highly skilled diaspora—have increased substantially over the past several decades. The share of imported high-tech products in gross domestic product (GDP) has risen by more than half in both low- and middle-income regions since the mid-1990s, that of imports of capital goods by 37 percent, that of imports of intermediate goods by 26 percent, and that of FDI inflows by six fold since the 1980s (World Bank, 2008, p.106).

FDI and technology transfer are increasingly interlinked.
Worldwide technology owners try to hasten technology exploitation by large scale production, strategic marketing and technology transfer (in FDI and non FDI forms). This has become indispensable for recovering huge research and development (R&D) and other costs.
This pattern of locating R&D differs radically from that of the past (the 1950s and 1960s) and challenges the traditional view that R&D activities by multinational corporations (MNCs) are undertaken mainly at home. While in itself the expansion of R&D beyond the borders of home countries of MNCs is not a new phenomenon, the scale of offshoring is rising and its geographical reach is spreading to developing countries.

Technology has become such a decisive factor of economic survival and became among the most important catalysts of economic growth.

However the scarcity of capital resources in most developing countries leads to the focus on FDI as a source of needed capital finance rather than a source of advanced technology.

This is where the issue of International Technology Transfer (ITT) arises. Countries consider the choice between ITT and domestic technology development.
To be successful, ITT should be complemented by local absorption, deployment, adaptation and further development while domestic technological capacity building requires huge investments in skills, R&D, technology infrastructure and support systems as well as favorable legal and policy frameworks.

The transfer of technology from advanced to developing countries can contribute to industrialization in the latter countries through saving the time and resources required for "reinventing the wheel". It unnecessarily takes a lot of money and time to reinvent the wheel, and most developing countries cannot afford that.

Measuring the technological contribution of FDI is particularly difficult, in part because the standard measure from the balance of payments includes both physical (brownfield and greenfield) investments and financial investments (mergers and acquisitions). This said, FDI inflows to developing countries rose from $10 billion in 1980 to an estimated $390 billion in 2007, or from 0.4 to 2.9 percent of GDP, with the bulk of the increase occurring during the late 1990s in response to the liberalization of FDI policies. Assuming that foreign firms employ a higher level of technology than the average domestic firm, then this rising trend will have increased the average level of technology in these countries, as well as their exposure to higher technologies (World Bank, 2008, p.115).
Unfortunately only few developing countries have had successful experiences in manipulating the technological tap of FDI. These countries are mainly Asian countries. Although technology is by nature non-rival (no diminishing returns for second users) and often transferable at no cost, there still exists a huge gap between the North and South.

In this concern, the major ITT problems of developing countries have to do with the very complexity of technology transfer transactions, lack of domestic absorptive capacity, limitation of sources of ITT, the lack of ability and skills required for negotiating successful technology transfers.

Concurrently, technology transfer through foreign direct investment has become the predominant channel of technology transfer, with other non-FDI forms of technology transfer losing weight. FDI can have important technological spillovers in host economies, especially if it takes a joint-venture form subject to local control. The international FDI environment still leaves a wide room for technological manipulation of spillovers of FDI. Developing countries such as Egypt should try to achieve their best possible technological gains from FDI.
Building dynamic, innovative, and flexible economies that add value through the creative application of human initiative is now a central challenge of all societies.
The challenge is particularly acute in Egypt.

This research attempts to explore whether there is potential for improving the exploitation of foreign direct investment as a source of international technology transfer to Egypt. Particularly, the research takes Egypt as a case study of the role of European FDI in ITT.

Thus, the research is intended to provide an economic, legal and institutional analysis of FDI as the currently predominantly source of ITT to developing countries, with special focus on Egypt.
It should answer a number of questions:
How has FDI taken the lead in ITT?
What are the distinct characteristics of FDI as a unique form of ITT, compared to other forms?
How do technological spillovers of FDI take place?
How are Arab countries developing in terms of science and technology?
What lessons can we get from the experience of Asian countries?
How are the legal and institutional environments of FDI in Egypt?