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SPILOVER EFFECTS OF FDI  
IN THE  
SERVICE SECTOR IN MOROCCO

-A Case Study of the Emerging Call-Centre Industry-

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## Abstract

The positive effects of foreign direct investments have encouraged several developing countries to offer preferential treatment of foreign investors. In addition to creating employment opportunities, it is argued that one of the most important contributions of foreign direct investments is the transfer of skills and knowledge i.e. spillover effects. While several studies have measured these spillover effects in the manufacturing sector the number of studies focusing on the spillovers in the service sector remains limited. Taking a closer look at Morocco, a country that has experienced a strong increase in foreign direct investment flows to the service sector in recent years, I have, by performing a field study in the emerging call-centre industry, found indications that spillovers exist but that there are differences between the service sector and the traditional manufacturing sector with respect to how spillovers occur.

Keywords: Call-centre industry, Morocco, Foreign direct investments, Spillover effects, Service sector.

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## List of abbreviations

ANRT	Agence Nationale de Réglementation des Télécommunications
CRI	Centre Régional d'Investissement
FDI	Foreign Direct Investment
IAM	Itissalat Al Maghreb
IMF	International Monetary Fund
IP	Internet Protocol
IT	Information Technology
MNC	Multinational Corporation
ONCF	Office National des Chemins de Fer
SAP	Structural Adjustment Program
SICCAM	Salon International des Centres de Contacts et d'Appels au Maroc
SMIC	Salaire Minimum de Croissance
UNCTAD	United Nations Conference on Trade and Development
VAT	Value Added Tax
WB	World Bank

## 1. Introduction

Foreign direct investment (FDI), especially in developing countries, has grown to constitute an important source of external financing. In addition, FDI inflows are expected to bring new technologies and know-how to the host economy through spillover effects. These spillover effects are expected to increase productivity and competition among domestic firms, thus contributing to economic growth. As a result policymakers in developing countries are increasing their efforts to attract FDI through various policy measures and economic reforms.

Although these policy measures and reforms have in fact increased foreign direct investments, especially in developing countries, there are still controversies concerning the actual improvements of production in domestic firms. Several studies have attempted to locate spillover effects in the manufacturing sector, with varying results. A possible explanation for these mixed results could be the use of different research techniques. Studies using cross-sectional data tend to report higher spillover effects than studies using panel data (Görg and Strobl 2001, p 737). The characteristics of the host economy also influence the ability to absorb and make use of technology transfers.

The service sector is today the most important sector in developed countries and it is becoming increasingly important in several developing countries. According to the United Nations Conference on Trade and Development (UNCTAD), the share of services in global FDI stock amounted to roughly 60 per cent in 2003 (UNCTAD 2004, p. 31). This shift towards services in FDI flows has been acknowledged and analysed extensively (see UNCTAD's World Investment Report 2004, *The Shift Towards Services*). Even though several studies focused on spillover effects in the manufacturing sector, the studies attempting to locate spillover effects in the service sector are limited. Furthermore, investments in the service sector are of a rather different nature to investments made in the manufacturing sector. Primarily, investments in the manufacturing sector imply a transfer of technology in the form of machinery and an introduction of new managerial skills. Investments in the service sector, on the other hand, tend to be more focused towards the transfer and development of human resources. Studies focusing on the spillovers effects from FDI to African countries remain few, and to my knowledge there are none focusing on the implications of FDI to the service sector.

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Morocco is a developing country with a relatively well-developed service sector, and a country that by African standards has experienced large inflows of FDI during the last few years. Furthermore, a significant amount of FDI has gone to the service sector, partly as a result of partial privatizations. Between 1999 and 2002 an average of 60% of total FDI went to the telecommunications sector (Office des Changes 2005).

To further understand the implications of spillover effects in the Moroccan service sector I have chosen to take a closer look at the sub-sector comprising call centres. The number of call centres in Morocco has grown from 3 to 140 in the years since 2001 and had an estimated turnover of €85 million in 2004 (CSC Peat Marwick / Capital Consulting – ANRT 2004). Examining the call centre industry will enable an understanding of the impact of foreign firms and in what way spillover effects influence the domestic economy.

The purpose of this study is consequently to examine if and how the presence of foreign firms in the call centre industry has influenced the Moroccan economy, and more specifically the impact their presence has had on the call centre industry itself. In order to understand the dynamics of spillover effects, parts of this study will be devoted to explaining the host country characteristics that have facilitated the inflow of FDI to the call centre industry, and hence enabled potential spillovers to take place. Finally, an attempt to offer tentative recommendations that will increase the spillover effects in Morocco will be made.

Due to the limited time and size of this study, the case study focuses only on the call centre industry as opposed to the entire service sector. In addition, the majority of the information and data relating to the call-centre industry come from a limited number of sources and have been gathered mainly through interviews. The results should therefore be treated with a certain prudence before being applied to the service sector as a whole, because spillovers are often sector-specific. However, the potential spillover effects in the call centre industry should give a fairly accurate picture of the implications of the transfer and development of human resources.

This study is structured as follows: Section two contains a theoretical framework for FDI and spillovers as well as results from earlier studies. Section three deals with the policies Morocco

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has implemented in order to increase and encourage FDI and consequently potential spillovers. In section four, the development and distribution of FDI inflows to Morocco are described. In section five, the call-centre industry in Morocco is the focus and the potential spillover effects in the call-centre industry are examined. Finally, section six contains a summary and the implications of introduced policies. Recommendations that could increase spillovers are also discussed.

## 2. FDI and spillover effects – Theoretical considerations

This chapter aims to clarify the dynamics of spillovers, and to do so the role of Multinational Corporations (MNCs) must be addressed as they play an important role in being the main source of technology. Taking a closer look at spillovers, the channels through which spillovers can lead to an improvement of technology and productivity in local firms will be discussed, as well characteristics of the host economy and their importance, as they determine to what extent spillovers will be successful. A section will be dedicated to the factors influencing the agglomeration of FDI and finally a reference to of previous studies will conclude the paper.

### 2.1. FDI and spillovers – The role of multinational corporations

Policymakers in developing countries put increasing effort into attracting FDI through various policy changes and economic reforms. By offering incentives for Multinational Corporations (MNCs) to invest, either through acquisition of domestic firms or through Greenfield investments, the host economy can benefit through tax incomes and creation of employment opportunities. Furthermore, FDI is also considered to contribute positively through spillovers. At this point a distinction should be made between horizontal spillovers (intra-industry) and vertical spillovers (spillovers from MNCs to local suppliers of inputs). According to Kokko (1992) spillovers are situations where the presence and actions of MNCs result in technological and productive improvements of domestic firms, and the inability of the MNCs to extort the full value of the gains (Kokko 1992, p. 2). The spillover effects may not always be as easy to distinguish as e.g. the creation of new jobs, but they can be of significant importance to the host country economy.

One of the most important host country benefits of FDI is the potential transfer of technology from MNCs to domestic firms. The importance of spillovers lies in the fact that they constitute the perhaps most important channel through which technology can be transferred from MNCs to domestic firms (Kokko 1992, p. 2). This emphasises the role of MNCs as an important source of intangible assets i.e. technological know-how, but also international experience and marketing skills that can be conveyed to domestic firms and hence improve their productivity (Proença, Fontoura and Crespo 2005, p. 1).

Now that the incentives for developing countries to attract MNCs have been introduced, it could prove valuable to clarify why MNCs tend to locate their facilities overseas rather than exporting or licensing their product/technology. The determining factors for MNCs to invest abroad have been summarized in what has come to be called the OLI framework: Ownership, Location and Internalization (see Dunning 1977, 1981). The *ownership advantage* implies that an MNC has a certain product or production process that other firms do not. It can also be a trademark that is worth controlling. The host economy must offer a *location advantage* that makes it profitable for the MNC to invest. Finally, the *internalization advantage*, which is more abstract but in short implies that it is more profitable to develop and manufacture the product or process internally rather than licensing.

Consequently MNCs have a number of factors to consider before initiating an overseas investment. As concluded by Markusen (1995) the most convincing argument for setting up an affiliate overseas as opposed to exporting or licensing, would be that this gives the MNCs the possibility of retaining a certain amount of control i.e. protect its brand and technology (Markusen, 1995).

## 2.2. A closer look at spillovers

Taking a closer look at spillovers it is important to understand that the mere presence of an MNC does not automatically imply an actual transfer of technology and skills, as such a transfer is dependent on the ability and motivation of local firms to absorb new skills (Blomström and Kokko 2003). In addition, the presence of MNCs may lead to an increased production of local firms without any spillovers of technology taking place. MNCs entering a new market might source out and initiate a co-operation with the best domestic firms that already possess the necessary level of technology to supply the MNCs, a scenario that could be described as “cherry picking” (Javorcik and Spatareanu, 2005, p. 46). This would result in increased production of domestic firms but it does not necessarily imply an actual transfer of technological know-how. Nonetheless, local suppliers might “rise to the occasion” and improve their productivity with or without help from MNCs to meet their supplier requirements, in which case it could be argued that vertical spillovers have taken place (Javorcik and Spatareanu 2005, p. 47).

### 2.2.1. How do spillovers take place?

When an MNC sets up a production facility overseas it does so with the expectation of generating a higher rate of return than local firms. The comparative advantage that the MNCs enjoy over local firms is some kind of firm specific asset e.g. technological know-how (Görg and Greenaway 2003, p. 3). These intangible firm specific assets can be transferred to domestic firms through various channels. However, the intra-industry transfer of intangible assets is a rather complex issue, as the MNCs will not just hand them over to local firms.

A pioneer in the studies of spillover effects was Caves (1974). He argued that the benefits of the host economy depended on spillovers from productivity that took place when MNCs could not capture all quasi-rents as a result of its productive activities (Caves 1974, p. 176). Caves divided these potential spillover effects into three classes: *allocative efficiency* that was improved, as MNCs tend to enter sectors where barriers to entry are high, thus resulting in increased competition and reduced monopolistic tendencies; *technical efficiency* that MNCs affected by improving the efficiency of domestic firms that compete with, supply to or purchase from them; *technology transfer* that implied that the presence of an MNC might speed up the transfer of technology (Caves 1974, pp. 176-177).

More recent studies shed light on new factors that have implications for spillover effects. Görg and Greenaway (2003) identify four main channels through which spillovers can have a positive effect on domestic firms, imitation; skills acquisition; competition and exports (Görg and Greenaway 2003, p. 3). In addition to clarifying these four different types of spillovers, I will discuss how the characteristics of the host economy influence the potential spillovers.

#### **Spillovers through imitation**

Imitation is the simplest form of spillover and implies that domestic firms copy the technology or production techniques used by MNCs and are as a result able to increase their productivity and efficiency. Domestic firms can go about imitating MNCs in a number of ways, either by observing and learning, which borders on industrial espionage, or by hiring staff with the appropriate competence that have been trained by the MNCs. However, it is in the interest of the MNCs to protect their comparative advantage as an improvement in the productivity and efficiency of domestic firms increases competition. Intellectual property rights can protect their production techniques and by offering their employees higher wages

they make sure their human capital stays in the company. In addition, their level of technology might be too advanced for domestic firms to absorb. According to He (2003) the imitation rate in the south is lower than in the north, thus urging companies to relocate and profit from monopoly power and increased profits, resulting in lower investments in the north and a lower level of innovation (He 2003). Despite the incentives MNCs have to protect their firm specific assets and it is in their interests to transfer technology to their local suppliers in order for them to meet their requirement standards, thus resulting in vertical spillovers that can be defined as spillovers from imitation.

### **Spillovers through skills acquisition**

As previously established, MNCs bring new technology to the host-country. This technology can be described as knowledge assets and consists of e.g. patents and technological know-how (Slaughter 2002, p. 3). MNCs tend to look for locations where wages are relatively low, but they still require rather skilled labour to work in their production facilities in order to effectively make use of their knowledge assets (Görg and Greenaway 2003, p.3). This will increase the demand for skilled labour in the host country. In the absence of skilled labour the MNCs will have to train low-skilled workers i.e. investments in human capital. Naturally MNCs want to protect this investment in human capital, as it is now an asset for the firm. By offering higher wages than competing local firms, MNCs offer their skilled labour an incentive to stay. Nevertheless, should skilled labour wish to move to an existing local firm, they bring with them the skills they have acquired in the MNC. This will generate improvements in productivity for the local firm. As a result the demand for skilled labour will increase, requiring further training of low-skilled labour. In time, the technology gap between local firms and MNCs will decrease, resulting in higher competition and innovation. According to Fosfuri, Motta and Ronde (1998) empirical research supports the notion that MNCs tend to offer more training to technical workers and managers, thus creating the prerequisites for potential spillovers (Fosfuri, Motta and Ronde 1998, p. 1).

### **Spillovers through competition**

When MNCs enter a domestic market the competition will increase. As mentioned earlier MNCs tend to enter sectors where barriers to entry are relatively high. Sectors with high barriers to entry tend to have monopolistic tendencies that are reduced when competition increases. According to Karpaty (2005) spillover effects from competition may be stronger if

the entry costs in the industry are high and the industry is more concentrated (Karpaty 2005, p. 99). In addition, Lipsey (2002) states that spillovers tend to be larger if the degree of foreign competition is large in the industry (Lipsey 2002, p. 44). Even if the MNCs enter a sector without monopolistic tendencies where local firms initially are unable to compete, the latter are forced to improve their efficiency, thus increasing competition and resulting in improved productivity (Görg and Greenaway 2003, p. 4). Depending on how well the domestic firms can meet the increased competition, they either manage to exploit their resources more efficiently and improve their technology rendering them more competitive or, if they fail to meet the competition, they are forced to leave the industry.

The entrance of MNCs can also cause spillovers through competition outside the sector they enter. The competition between local firms in other sectors can increase as they compete to become a supplier of inputs to the MNC, thus resulting in a more efficient use of resources and increased productivity (Lipsey 2000, p. 41). However, inter-industry effects of the presence of MNCs have received a substantial amount of speculation, but little empiric testing (Lipsey 2000, p. 42).

### **Spillovers through exports**

MNCs entering a new market might be either export oriented or focused on supplying the local market. In either case, MNCs tend to have established distribution networks, information about export markets, information on consumer tastes and other important information on foreign markets that are valuable when exporting (Görg and Greenaway 2003, p. 4). Gathering all this information and establishing distribution networks imply a sunk cost for the exporting firm. The presence of MNCs lowers the sunk costs and encourages exports from domestic firms (Karpaty 2005, p. 94). Through imitation or cooperation with MNCs domestic firms can gain access to export markets (Görg and Greenaway 2003, p. 4). This also implies that they have to compete with firms outside their domestic market and should consequently imply that they have to improve their productivity. This is also supported by empirical studies that suggest that the productivity in export-oriented firms is higher than in firms that only focus on supplying the domestic market (Görg and Greenaway 2003, p. 4).

### 2.3. How do host country characteristics affect spillovers?

There are several factors in the host economy that influence spillover effects and determine how well domestic firms can absorb new technology and know-how. The most apparent factors are the host country's labour skills, level of education and learning capability. With a higher level of education and skilled labour in the host country, costs associated with training are decreased and the learning process shortened (Kokko 1992, p. 85). The level of education in the host country is also a factor that determines which types of technology are transferable (Kokko 1992, p. 82).

The size of the initial technology gap between MNCs and domestic firms determines the extent of technology spillovers (Kokko 1992, p. 81). The existence of a technology gap between MNCs and domestic firms sends a signal to the MNC on how well domestic firms can absorb new technology. The bigger the gap, the less likely the host country will be able to absorb technology and the lower the potential spillovers (Görg and Greenaway 2003, p. 5). Not only does this influence the MNCs' decision to invest but it also has implications for what technology the MNCs decide to transfer to their affiliate.

Furthermore, spillovers occur faster for products that are imitations i.e. in sectors where a substitute for the MNCs' products exists and competition is larger (Kokko 1992, p. 82). A conclusion one can draw from this is that policy makers in host countries can increase spillovers by increasing competition in sectors where MNCs are established, and they can achieve this by supporting domestic firms and increasing their learning capabilities.

The speed at which the host economy is able to adapt to the activities of the MNCs is also a determining factor for the potential spillovers. If domestic firms can adapt to the activities of the MNCs, the latter will be able to establish upstream and downstream networks through suppliers and distributors of their products (Görg and Greenaway 2003, p. 5). This will increase the speed at which technology transfers take place between MNCs and domestic firms.

Other factors that influence the transfer of technology are for instance minimum-wage laws and an over-valued exchange rate. Minimum-wage laws might cause wages to exceed market equilibrium wages, thus creating incentives for MNCs to use capital-intensive technologies

rather than labour-intensive technology, and an over-valued exchange rate will encourage imports of equipment and other inputs rather than using local suppliers (Kokko 1992, p. 87).

In conclusion there are several factors that have implications for how well the host economy will be able to benefit from the presence of MNCs. The size of the potential spillovers is determined by how well domestic firms can absorb new technology and adapt to the activities of the MNCs. This sends a message to the host economy government and policy makers that they have the opportunity to increase the potential spillovers by offering assistance to their domestic firms through e.g. subsidized training or other measures that will increase their learning capabilities and decrease technology gaps.

## 2.4. FDI and agglomerations

The agglomeration of industries on both international and national levels depends on certain factors. It is often assumed that the main difference between countries lies in their endowments of primary factors. It is also assumed that these primary factors are immobile between countries i.e. the endowments are exogenous (Venables 2001, p. 3). Different products use different production techniques and most importantly use primary factors with different intensities. Consequently, and according to the Heckscher-Ohlin-Samuelson theorem, economies that are relatively labour-abundant will focus on production of labour-intensive goods and vice versa. A country's comparative advantage in a certain sector or industry is accordingly determined through an interaction between the specific country characteristics and the demanded industry characteristics (Venables 2001, p. 4).

In the "new trade theory" developed in the 1970s, the focus was turned to the increasing returns to scale on firm level. As a result market access and market size grew to become important factors influencing the specific country characteristics. Firms faced with increasing returns to scale in production will locate in larger markets. This will allow them to save transport costs and enable them to have a lower marginal cost of supplying their consumers. As a result industries of a certain type will tend to locate in certain regions where the characteristics are favourable, resulting in agglomerations.

The main motives for FDI are to gain access to the host country's market, horizontal FDI, and to profit from lower wages by moving low-skilled labour intensive production to low-wage

host countries, vertical FDI (Venables 2001, p. 10). The decision to invest in a host country in order to gain access to the domestic market is usually an alternative to supplying the market through exports. While exports might increase marginal costs due to transport costs the alternative, horizontal FDI, will increase fixed costs as a result of opening and operating a new production facility. When it comes to vertical FDI the main advantage is the access to low-wage labour. As different stages of production requiring low-wage labour often take place in different locations, the host economies can be expected to be geographically close to or have good transport links with high-wage countries (Venables 2001, p. 11). Alternatively, production is of a commodity that is not sensitive to transport costs. In both types of FDI there is evidence of geographic clustering or agglomeration.

An extremely important cause of agglomeration is the labour market and the development of locations with skilled labour. When a location has been established in a specific activity it is difficult for an additional cluster to form, as the location may have a profound comparative advantage and be able to pay competitive wages.

## 2.5. Previous studies and empirical evidence

The earliest empirical studies attempting to locate productivity improvements in domestic industries as a result of foreign direct investments were Caves (1974), Globerman (1979) and Blomström (1986) using cross-sectional data from Australian, Canadian and Mexican industries respectively. The models used in these studies regress the total productivity of domestic firms on several independent variables. To measure the potential spillovers from MNCs a variable that estimates the foreign presence in the industry is included e.g. share of employment in MNCs over total employment in industry. If the variable estimating foreign presence produces a positive and statistically significant coefficient in the regression analysis, it is assumed that spillovers have occurred from MNCs to the domestic industry.

A number of studies using the same approach and cross-sectional data have managed to locate positive and statistically significant intra-industry spillovers. However, as concluded by Görg and Strobl (2001) the use of cross-sectional data can lead to biased results (Görg and Strobl 2001). According to Görg and Strobl (2001) the use of cross-sectional data fails to control for the fact that MNCs might be attracted to an industry with high productivity rather than an industry with lower productivity (Görg and Strobl 2001). This would result in a positive and

statistically significant coefficient for foreign presence and productivity in the sector, even though the foreign presence was attracted by the productivity in the sector rather than causing it.

Görg and Strobl (2001) argue that panel-data studies using firm-level data are more appropriate when estimating spillover effects. Using panel-data studies it is possible to investigate the productivity of domestic firms over a longer period of time, and to control for other factors.

Haddad and Harrison (1993) are the first to make use of firm-level data for several years, and using panel-data econometric techniques they estimate the spillover effects in the Moroccan manufacturing sector. Their findings report negative spillovers from MNCs i.e. the presence of MNCs in Morocco reduces the productivity of domestic firms (Haddad and Harrison 1993). A number of other studies using panel-data report similar negative or insignificant results for spillover effects e.g. Kokko, Tansini and Zejan (1996) in Uruguay and Aitken and Harrison (1999) in Venezuela. In fact Liu, Siler, Wang and Wei (2000) is the only study using panel-data that has found a positive and statistically significant intra-industry effect of MNCs' presence on domestic firms (Liu et al. (2000).

In addition to the mentioned econometric studies there are also field studies that focus on a specific sector or FDI project. These studies often give a good description of a specific sector but as a result they are often difficult to apply in a more general perspective.

There are different explanations for negative or statistically insignificant results. Since MNCs often possess a firm-specific asset, they are able to produce using a more advanced production technology allowing them to have lower marginal costs than domestic firms and consequently attracting demand away from the domestic firm (Görg and Strobl 2001, p. 726). Another explanation could be that positive spillovers only affect certain firms in certain industries or domestic firms that have reached a certain level of technology, thus minimizing the technology gap to the MNCs (Görg and Strobl 2001, p. 726).

### 3. Policies to attract FDI to Morocco

As the interest in attracting has increased, several developing countries have started to actively liberalise their foreign investment regulations. The objective is to attract MNCs to their countries. In addition to the known positive effects of FDI i.e. creation of employment opportunities and a source of external capital, it is believed that FDI can benefit the host economy through transfers of technology and know-how, which would increase the efficiency and productivity of the domestic economy. With the objective of realizing such spillover effects, policymakers in developing countries have implemented policies to attract FDI. MNCs are offered e.g. tax holidays, subsidies for infrastructure and import duty exemptions.

Morocco has been one of the most important destinations for FDI in recent years, both in comparison with other Arab countries and with other countries on the African continent (UNCTAD 2001). However, it is well worth noting that neither the Arab countries nor other African countries are big recipients of FDI.

In order to better understand the dynamics of FDI and the potential spillover-effects, this section of the study will be devoted to the policies implemented by Morocco in order to increase FDI inflows. As FDI is a prerequisite for positive spillover effects, an increase in FDI is necessary in order to benefit from positive spillovers. This section will serve to link the implications of government policies toward FDI and the development of FDI inflows, which will be addressed in the following chapter.

### 3.1. Policies implemented in favour of FDI in Morocco

It is worth noting that the first major policy implemented by the Moroccan government took place in 1973. The Maroccanisation decree of 1973 restricted foreign ownership in certain industrial and commercial activities to 49 percent. Evidently this was not intended to promote FDI but rather a political measure to decrease the extensive French influence in the Moroccan economy.

The first major steps towards a liberalisation of the economy were taken with the adoption of the Structural Adjustment Program (SAP) in 1983. Under the supervision of the International Monetary Fund (IMF) and the World Bank (WB) the adoption of the SAP and the implementation of a new investment code resulted in several policies vis-à-vis foreign investments and trade. Full foreign ownership of Moroccan firms in certain sectors (especially the manufacturing sector) was allowed, there was less restriction on the repatriation of capital and fiscal policies in favour of FDI were adopted. The new investment code guaranteed among other things an unlimited transfer of profits and dividends to foreign investors and the repatriation of foreign capital and related capital earnings (Bouoiyour 2003, p. 4). In 1985 the law restricting foreign majority-ownership was abolished in all industrial sectors. Further liberalisations took place in 1988 when the administrative procedures governing the authorization of FDI were simplified and regulations applying to non-resident foreigners were extended to non-resident Moroccans (Haddad and Harrison 1993, p. 55). The privatization programme was initiated in 1989 and further accelerated in 1993. In 1995 the eight complex chapters of the 1983 investment code were replaced by a single document called the "Investment Charter". This Investment Charter states the fundamental aims of the Government for the coming ten years concerning the development and promotion of foreign investments through improvements of investment conditions and an increase in the number of fiscal incentives.

### 3.1.1. The Investment Charter

The Investment Charter passed by the parliament in 1995 aims to encourage investments, both domestic and foreign. The incentives offered to investors can be summarized as follows:

- Reducing the tax burden related to acquiring stocks, tools, equipment goods and land necessary to realise the investment
- Reducing the taxation on income and profits
- Granting a preferential taxation regime in favour of regional development
- Strengthening the guarantees granted to investors by setting the grounds for appeal in both national and local tax matters
- Promoting offshore financial centres, export processing zones and a free industrial warehouse system
- Better assessment of the tax burden and right application of free competition rules, especially by reconsidering the application field of the granted tax exemptions

*Source: Loi-Cadre No. 18-95 Formant Charte de l'Investissement*

By passing the Investment Charter in 1995 corporate and individual income taxes were reduced, as well as many import duties. Furthermore, the VAT (Value Added Tax) on certain capital goods and equipment was eliminated. For foreign investors all locally acquired goods or equipment are exempted from VAT. For companies exporting goods or services a five-year corporate and income tax holiday is awarded, and the following period offers a 50 percent reduction (Abdallah Chater, Centre regional d'investissement de la Région du Grand Casablanca, 2004-04-14). However, the tax reduction depends on the export turnover and in the case of companies exporting services it only applies to export turnovers in foreign currency.

The National Solidarity Tax, normally attached to the corporate tax, is suppressed. However, the profits and income that are entirely exempted from corporate tax, due to the present and future legislations establishing incentive measures for investments, are liable to a tax equal to 25 percent of the corporate tax which would have been eligible had exemptions not existed (Article 6, Charte de l'Investissement). According to Article 15 of the Investment Charter investments carried out in foreign currency enjoy a free transfer of assets and benefits (Article 15, Charte de l'Investissements). Furthermore, administrative procedures related to

investments are simplified and a unified national administrative organ offering information and assistance to investors as well as promoting investments has been established. An investment that is considered of great importance due to; the creation of a significant number of permanent employment opportunities, the region to where its located, the transfer of technology or the contribution to environmental protection, can be granted additional advantages by the government through partial exemption from expenses relating to e.g. land acquisitions necessary to realise the investment, external infrastructure expenses and vocational training costs.

### 3.2. Technology

Concerning Information Technology (IT) and communication Morocco is among the leading countries on the African continent. Several measures have been taken to develop and improve the country's communication and IT facilities in order to be able to compete internationally and attract foreign investments. Internet has been accessible since 1995 and Itissalat Al Maghreb (IAM), which is responsible for the telecommunications network in Morocco, dominates the sector. IAM distributes Internet through its own network or through one of the existing 130 suppliers who individually set tariffs. However, with the entrance of Maroc Connect, the first private Internet distributor, prices were reduced by 50 percent in 1999 (Centre régional d'investissement de la Région du Grand Casablanca).

A Techno-park that is located in Casablanca is dedicated to IT. In addition, a second Techno-park, to be constructed in Casablanca, will enable the region to serve the increasing number of actors in the sector more effectively. The major goals of the existing Techno-park are to facilitate, accelerate and spur the economic and social development by focusing on four main factors:

- Science, communication technology and information technology
- Innovation and transfer of technology
- Creativity and flexibility of "start-ups"
- An attractive location for international leaders in the IT sector

Some of the services offered in the Techno-park include assistance to new projects both on an academic level as well as on an industrial level. Existing facilities offer among other things

commercial assistance, high-speed Internet connections, business centres and equipped conference rooms.

Concerning international companies, they benefit from all assistance necessary for their installation in the region. In addition, the proximity to local “start-ups” offers the opportunity to create networks and co-operations that will promote the regional development.

The Techno-park also houses education centres for IT and telecommunications including engineers and technicians related to the sector. In sum the Techno-park serves as a promotion window for the IT and communications sector of Morocco.

### 3.3. Human resources

Morocco is a country where 54 per cent of the population (total population is approximately 30 million) is below 25 years of age. In addition to having a young population, a large share of this young population is relatively well educated. Since 1987 measures have been taken to increase the co-operation and dialogue between academic institutions and professional institutions (Abdallah Chater, Centre regional d’investissement de la Région du Grand Casablanca, 2004-04-14). This in order to make sure that the education and training provided are in line with what is demanded.

There are several projects that are establishing new education centres especially directed towards sectors such as electronics, agricultural industry and IT. These are sectors that Morocco is particularly eager to promote and therefore the government is taking measures to improve and promote education facilities. By doing so the government is promoting Morocco as a destination for investments in these sectors. As a consequence of the demography and the measures taken to improve training and education, there is a deep talent-pool of young and motivated men and women with two to four years of university studies behind them (Kaltoum Lajfari, Webcad, 2006-04-10). Pooled with university degrees a widespread knowledge of the French language (Spanish in the north), a high level of motivation and competence in relevant fields such as communications, commerce and technology make Morocco a country rich in human resources. As the supply of well-educated labour is high and wages are still considerably lower than in Europe, it is an attractive destination for foreign investors looking for well-educated and skilled labour.

### 3.4. Centre Régional d'Investissement

As a step to simplify procedures for investors in Morocco, foreign as well as domestic, every region of the country has established a regional centre for investments, Centre Régional d'Investissement (CRI). The principal objectives for these centres are to simplify administrative procedures for potential investors. It could be procedures related to the creation of a new enterprise, a new investment or the development of an existing investment project (Centre régional d'investissement de la Région du Grand Casablanca). In addition, these centres work actively to promote their specific regions to future investors. As a promoter the CRI has developed a specific mission-statement for its specific region and works actively to attract investors that would benefit the region.

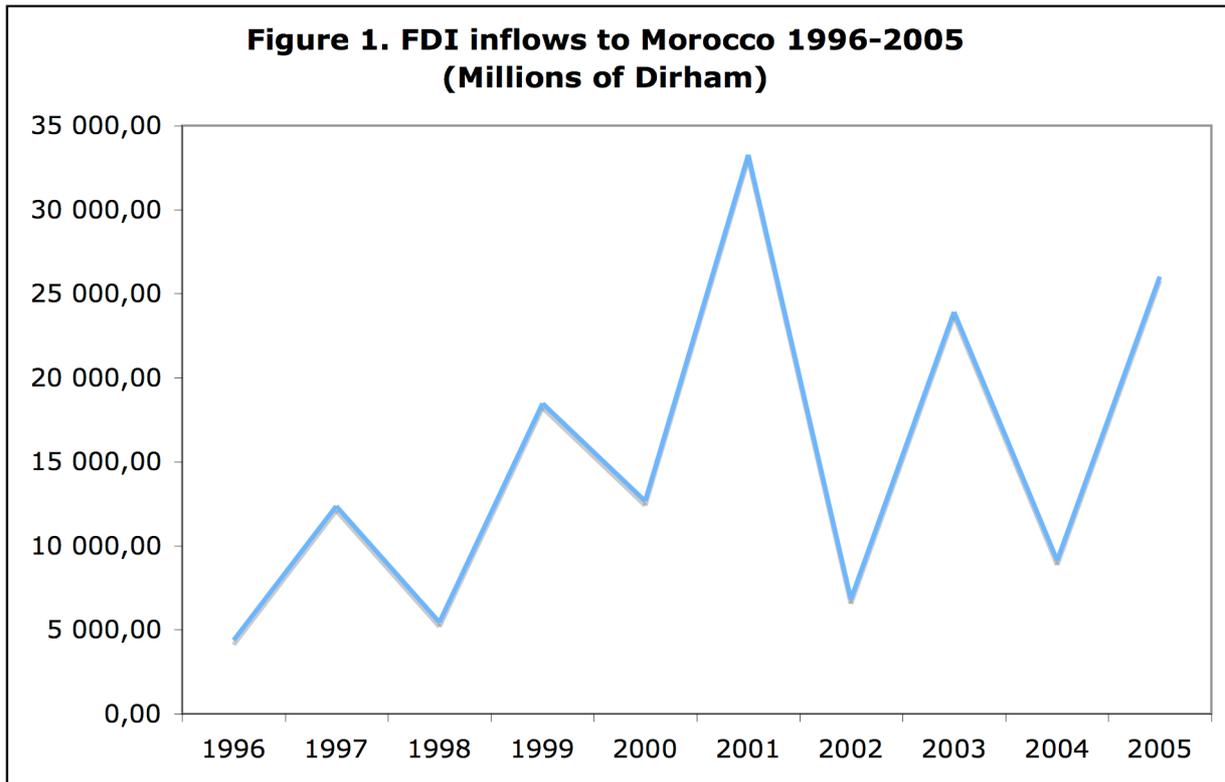
## 4. FDI and Morocco

Morocco, like many other developing countries, is actively seeking to attract FDI not only as an important factor in creating employment opportunities and as an additional source of income, but rather for the reason of potential spillovers of knowledge and technology. The strong public support for FDI in Morocco is expressed through the numerous measures taken by the government i.e. simplification of administrative procedures, subsidies, tax holidays and actions to improve the educational institutions. Before addressing the question of whether FDI in Morocco has led to spillovers of knowledge and technology, this section will briefly describe the development of FDI inflows in recent years. FDI inflows are a prerequisite for potential FDI spillovers and the development of the FDI flows to Morocco can at least partially be attributed to the measures taken by Morocco in recent years to attract investments.

### 4.1. FDI inflows to Morocco

FDI inflows to Morocco are relatively high, compared to other countries on the African continent and in the Middle East region. However, Africa only receives a few per cent of world total FDI flows. Morocco is also often cited as “good pupil”, which refers to the fact that it follows the recommendations of the IMF and the WB and is therefore often used as an example to follow for other developing countries. Nonetheless, FDI inflows to Morocco have been volatile (see figure 1), a phenomenon that is largely explained by the privatization process that has been taking place.

Over the period 1996 to 2005, approximately 50 per cent of total FDI inflows went to the telecommunications sector, which makes it the most popular destination for foreign direct investments (Office des Changes 2006). Other important sectors are e.g. the industrial sector that has received 29 per cent of total FDI inflows since 1996. A sector that has been experiencing increasing FDI flows, especially since 2002, is the real estate sector. The FDI inflows to this sector have seen a steady increase since 2002 and in 2005 constituted approximately 10 per cent of total FDI inflows. Large privatization deals e.g. Maroc Telecom in 2001, accounted for the bulk of FDI flows received in that particular year.



*Source: Office des Changes 2006 (€1=dirham 10)*

*For a more detailed description of the distribution of FDI inflows see Appendix A where the inflows are presented according to sector of activity.*

In the last few years FDI inflows to the telecommunications sector have become even more important. The telecommunications sector has grown into one of the most important destinations for FDI. The development of the telecommunications sector and its resulting attractiveness for foreign investors are a result of the government measures implemented to promote Morocco as a country with advanced IT capabilities and a well educated workforce. The most important source of FDI is not surprisingly France with approximately 80 per cent of total FDI inflows in 2004 (Office des Changes 2004, p 34). Other important sources of FDI inflows are the United States, Spain, Switzerland and Saudi Arabia.

Important factors that have contributed to the development of FDI inflows to Morocco are primarily an increased openness and visibility, several structural reforms concerning e.g. administration, education, legal policies and employment regulations (Sayah 2001, p. 11).

## 5. The Moroccan call-centre industry and spillovers

The sector comprising call-centres is a recent phenomenon in Morocco. It was originally a project initiated by a few entrepreneurs in 2000 that turned out to be an instant success. It quickly grew and today it attracts world leading names in the call-centre and customer relation sector e.g. Phone Assistance, CRM Value, Outsourcia, Accolade and Sitel.

In addition to creating numerous employment opportunities for young graduate students the sector has a positive effect on other sectors of the economy e.g. real estate (office space), suppliers of various technology solutions (telephone, information, Internet and software) and suppliers of various office equipment, thus resulting in horizontal spillovers (see section 2.1.). Furthermore, the presence of call-centres in Morocco contributes to the diversification of the Moroccan economy and is an important source of foreign currency (Mohamed El Ouahdoudi, Maghreb Centres de Contacts, 2006-04-30). Another important aspect of the jobs created through call-centres is the social aspect. The average employee in a call-centre is 25-26 years of age with at least 2 years of University studies. Unemployment among young people in Morocco is high, and while most graduate students realize that a job in a call-centre is temporary, it is considered as a respectable occupation and it pays well enough to allow for a son or daughter to support his or her family. This is important from a social point of view as it gives young people, at least for a short time, a sense of satisfaction in being able to support or help to support their family (Nadia Chraibi, Delta Call Maroc, 2006-05-19). Many employees in call-centres reason that while they are not satisfied with staying in a call-centre forever, it is a better alternative to just staying at home (Kaltoum Lajfari, Webcad, 2006-04-10). The salary in call-centres is roughly dirham 4000 per month (approximately €400) with slight variations depending on the location. Salaries in Casablanca tend to be slightly higher. This is still twice as much as the minimum wage, Salaire Minimum de Croissance (SMIC). With increased competition among call-centres for labour, wages are bound to increase. According to Nadia Chraibi, Director of Delta Call Maroc, the salary is not always the most decisive factor among potential employees. Factors like the overall atmosphere in the office and the location of the office are often more important when deciding which call-centre to join (Nadia Chraibi, Delta Call Maroc, 2006-05-19). The location of the call-centre has proved to be especially crucial in a big city like Casablanca, where public transports are poor and travel therefore takes a

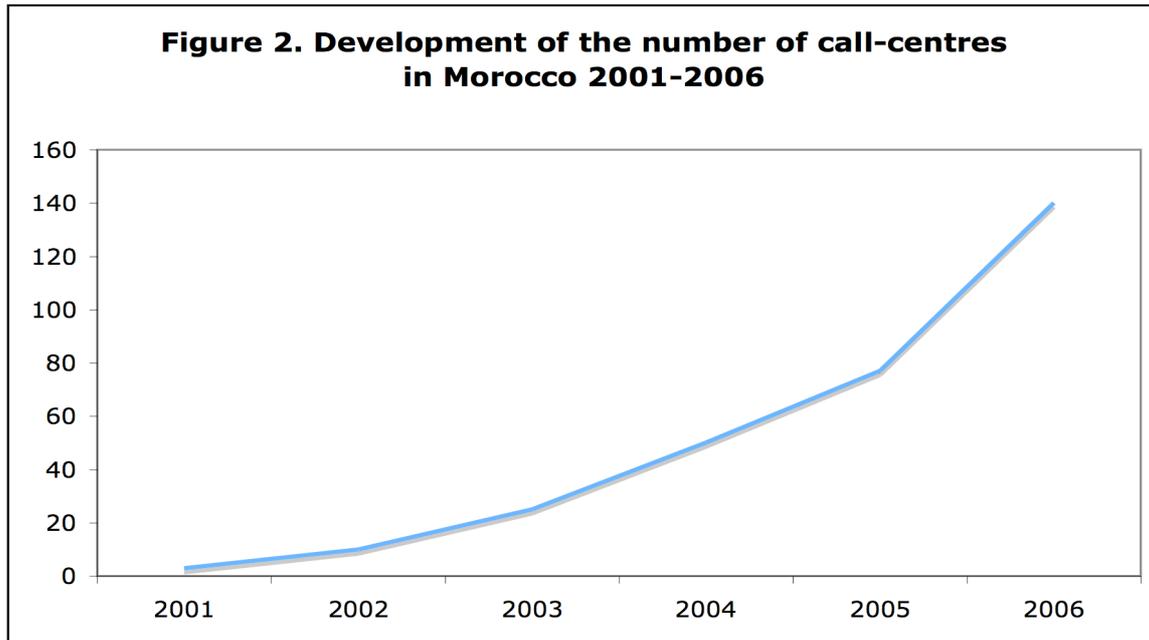
considerable amount of time. Some call-centres have solved the problem by offering transportation to their employees to and from the office in the morning and the afternoon.

The reason why Morocco has been so successful in attracting FDI to the call-centre sector has to do, among other things, with the fact that Morocco has a reliable technology infrastructure that offers attractive solutions for voice transfer e.g. by satellite connections or by Internet Protocol (IP). In addition, Morocco has a large number of young graduate students that are open to European culture and have a positive attitude towards working in a call-centre. This is contrary to the perception prevailing in e.g. France where working in a call-centre is less appreciated. This section will begin by describing the dynamics of the call-centre industry in Morocco and thereafter assess the potential spillover effects in the sector.

### 5.1. Development and extent of the call-centre industry

Morocco is currently the world's leading offshore country for call-centres targeting the French-speaking world. According to the Salon International des Centres de Contacts et d'Appels au Maroc (SICCAM) the call-centre industry in Morocco has developed from 3 call-centres in 2001 to over 140 operational call-centres, serving the domestic market as well as an international market (SICCAM 2006). One of the first call-centres to set up in Morocco was Atento Maroc in 2000. Atento Maroc is a branch of the Spanish operator Telefonica and has roughly 1000 employees in Morocco (SICCAM 2006).

The call-centres operating in Morocco can be divided into different groups. There are call-centres that are entirely owned by foreign investors, there are call-centres that are entirely owned by Moroccan investors and there are call-centres that have both foreign and domestic owners. It is therefore difficult to say how many call-centres are in fact Moroccan and how many are in fact foreign. The majority of the call-centres are, however, controlled by foreign owners with a strong majority of foreign owners originating in France. There has been an increase in call-centres with Spanish owners e.g. the Spanish operator Grupo Konnecta recently announced their installation in Casablanca and Tangier. The call-centres focusing on the Spanish market tend to cluster in Tangier as knowledge of the Spanish language is much more widespread in the north of Morocco.



*Source: SICCAM 2006*

According to a report published by Agence Nationale de Réglementation des Télécommunications (ANRT), the first clients were large international groups that set the standards for the early actors on the Moroccan market, and thereby forced new entrants on the Moroccan call-centre market to meet the prevailing high standards (ANRT 2004, p. 18). This is in line with the theories presented in the theory section, establishing the importance of MNCs and their role in FDI. Approximately 20 new call-centres are created every year in Morocco both by foreign investors and domestic investors. The sector employs close to 20 000 people and it is rapidly growing. With an annual turnover of €85 million in 2004, Morocco outweighs the combined turnover of Romania, Tunisia, Senegal and Mauritius that are the main competitors. Presently seven different languages are in use by call-centres in Morocco: Arabic, Berber, French, Spanish, English, German and Italian.

While the share of call-centres serving the domestic market is still low, it is increasing. An estimated 30 per cent of the call-centres are directed towards the domestic market (Mohamed El Ouahdoudi, Maghreb Centres de Contacts, 2006-04-30). However, there are call-centres that serve both the domestic market and an international market e.g. Atlas on Line. Several of Morocco's biggest companies have established their own call-centres in order to handle their relations with their clients and increase their efficiency e.g. Maroc Telecom, Méditel, Royal Air Maroc and Office National des Chemins de Fer (ONCF).

Today the majority of the call-centres are located in Casablanca and Rabat with a strong emphasis on the former. At least 70 per cent of the call-centres in Morocco are located in Casablanca. The explanation is that the majority of the economic activity in Morocco is concentrated to Casablanca. However, the concentration of call-centres to Casablanca and Rabat is decreasing. Cities like Fez, Marrakech and Tangier are becoming increasingly popular as destinations for call-centres. Especially call-centres directed towards the Spanish market are concentrating in Tangier.

It is quite obvious that the call-centre industry in Morocco has experienced an enormous growth in the last few years, and according to a recent study the call-centre industry in Morocco has the potential to increase its annual turnover to €200-300 million and employ 130 000 people by 2013 (Chmiron 2005, p. 29).

This recent success owes a lot to the foreign call-centres for leading the way, but Morocco paved the ground by the liberalisation of the domestic market. This, the numerous measures to make FDI attractive proved enough to capture the interests of foreign investors. A few reasons why Morocco has experienced such success in attracting FDI towards the call-centre industry are mentioned below:

- Language skills, French and Spanish
- Geographic and cultural closeness to Europe
- A young, highly qualified, motivated, available and cheap workforce
- A social structure that is more flexible concerning working hours
- Excellent references from firms already present in the market
- A telecommunications sector that is well developed
- A clear and transparent sector of activity
- Jurisdiction is modern and transparent
- Preferential treatment of FDI
- A number of European firms active in other sectors that are already installed

In addition to the above factors, Morocco is a cultural crossroad between the Western world and the Orient, North and South. Many multinational companies have their African headquarters in Morocco and the Western influence in especially Casablanca and Rabat is noticeable.

## 5.2. FDI and agglomeration

The agglomeration of FDI to the call-centre industry in Morocco has to do with a number of different factors. In addition, the agglomeration to specific geographic locations within the country has a simple explanation.

To begin with, Morocco has the necessary comparative advantages to attract FDI to the call-centre industry. It has an attractive investment climate that offers preferential treatment of foreign investors. Morocco also has a well-developed technology infrastructure that simplifies the installation of firms in the call-centre sector. However, the most important asset in Morocco is the skilled labour force. This is also one of the most important factors that result in agglomerations of FDI (see section 2.4.). In addition, call-centres and the export of their services are not sensitive to transport costs, which enable them to cluster in locations where the comparative advantages are highest. The call-centres do not necessarily have to be located in close geographic proximity to the market that they serve. It is sufficient to have the required skills and appropriate language.

Turning to the agglomeration of call-centres in Morocco, the majority of the call-centres are located in Casablanca and Rabat. This is a result of the already well-established economic activity in these regions. Casablanca is the economic capital of Morocco while Rabat is the official capital with the majority of governmental institutions. Both cities have close ties and great transport links with the major cities in Europe. In addition, these two cities contain a pool of young and well-educated graduates that are familiar with Europe. However, as the call-centre industry continues to expand, several firms choose to locate in other cities in Morocco e.g. Fez, Marrakech and Tangier, in order to take advantage of lower office rents and the particular skills these cities offer. Most apparent is the location of call-centres to Tangier where Spanish is a more widespread language than French. This has encouraged call-centres serving the Spanish market to locate in Tangier, which is also geographically very close to Spain. In short the call-centres in Morocco are located to the major cities as this is

where the majority of the skilled labour force is located. The majority of the call-centres are still located in Casablanca, as this is the economic capital of the country, but an increasing number of call-centres are beginning to locate in other cities.

### 5.3. Labour market and gender aspect

The implications for the labour market are a central point when looking at call-centres, as the human resources constitute the most important factor in the industry. It does not really matter who owns the call-centres, whether it is a foreign or domestic owner, there is still a transfer of skills and knowledge to the employees in the company. The call-centre industry has an important role to play as a stepping-stone for young graduates. The industry offers a possibility for young graduates to gather skills and knowledge as well as professional experience before moving on to pursue a career. With an elevated level of unemployment among young graduates, the increasing number of call-centres offers the opportunity to gain experience and knowledge and at the same time earn money to help support their families. Employment in a call-centre is most often a temporary occupation while searching for a more permanent job. Nonetheless, working in a call-centre is a well-respected occupation in Morocco and it offers an opportunity to gather professional experience and knowledge. In addition call-centres offer competitive salaries.

As discussed in the theory section, the ability to absorb skills depends heavily on the level of education and the learning capability among employees. With relatively well-educated employees and a positive attitude towards Europe, firms in the call-centre sector find that the costs associated with training and the overall learning process are significantly shortened (various interviews). In order to promote on the job training and increase labour skills, the Moroccan government offers subsidies to firms that have some form of internal training.

The call-centres in Morocco also play an important role by employing a significant number of women. The most reliable statistics indicate that more than 50 per cent of the people working in the sector are women (SICCAM 2006). The sector presents women with an attractive opening to the labour market and a professional career by offering them the opportunity to gather professional experience and improve their skills.

## 5.4. Spillover effects in the call-centre industry

The transfer of technology and knowledge from foreign firms to domestic firms, i.e. spillover effects, is one of the most important contributions of FDI. There are several channels through which spillovers can take place in the call-centre industry in Morocco. Below follows a discussion on the potential spillover effects in the Moroccan call-centre industry.

### 5.4.1. Four different spillover effects

As discussed in Chapter 2 spillover effects can be divided into four different groups: spillovers through imitation, spillovers through skills acquisition, spillovers through competition and spillovers through exports. To begin with, these four groups will be addressed in order to assess whether spillovers have taken place.

#### **Spillovers through imitation**

The call-centre industry in Morocco is a very recent phenomenon and the pioneers were foreign investors. It seems as if foreign investors, by entering the Moroccan market and establishing the first call-centres, discovered a new market and therefore paved the way for later call-centres, in that sense there have been spillovers through imitation. As both foreign and domestic investors discovered the potential in the market, they imitated earlier call-centres and established themselves in Morocco. However, it is the idea of establishing a business that has been imitated rather than the technology or knowledge. The foreign firms acted and continue to act as the locomotive of the industry (Mohamed El Ouahdoudi, Maghreb Centres de Contacts, 2006-04-30). By bringing their knowledge and technology to Morocco, foreign owned call-centres developed the market and continue to do so today. The technology used is the same in all call-centres and readily available to anyone who is prepared to pay for it (Nadia Chraibi, Delta Call Maroc, 2006-05-19). Consequently, any Moroccan investor wishing to start a call-centre can easily get hold of the necessary technology. In that sense there have been few spillovers of technology through imitation that can be accredited to foreign call-centres. It is more likely the liberalisation of the Moroccan market that has enabled domestic investors to go abroad to find technology.

As many call-centres are extensions of firms in Europe, there has been a transfer of knowledge and technology between the head office and the call-centre in Morocco. For example, a large number of call-centres, both foreign and domestic, have foreign Directors,

predominantly French. However, Morocco is a country with close ties to France, as a result of which management and leadership skills have already been influenced by French standards.

As the first call-centres were foreign they set the standards for the ones that were to follow. Furthermore, the majority of services offered from the call-centres are bound for the foreign market. Consequently, call-centres in Morocco are strongly influenced by European standards. As Moroccan call-centres are directed towards the European market it is essential that the employees are well aware of the culture and country they are working towards.

It is important to clarify that the call-centre industry in Morocco is still predominantly comprised of foreign firms. This means that foreign firms set the standards and any domestic firms hoping to compete for clients have to follow these standards. Whether this qualifies as spillovers through imitation or simply as a necessity to be able to operate on the call-centre market is difficult to decide. In conclusion, the spillovers through imitation that have taken place are the ideas of operating a call-centre out of Morocco that have been imitated and continue to be imitated. In order to do so, certain hardware is necessary but most essential is the human capital.

### **Spillovers through skills acquisition**

The human capital is the most important factor in a call-centre and Morocco has an abundance of young and well-educated graduates. Nevertheless, depending on what the main objectives of the call-centres are, be it marketing, assistance or sales of a certain product, the employees require training in order to become familiar with the specific product or service. When it comes to sales technique and marketing there has definitely been a transfer of knowledge from foreign firms to local firms (Mohamed El Ouahdoudi, Maghreb Centres de Contact, 2006-04-30).

The training aims to give the employees knowledge of sales techniques, marketing skills and depending on what market the call-centre is oriented towards, specific knowledge related to that market (SICCAM 2006). In addition, employees receive training and become accustomed to working with computers.

Young graduates that have been working and received training in call-centres have the potential to become excellent entrepreneurs and businessmen. There are several examples where young employees have later become successful managers or directors of companies (Mohamed El Ouahdoudi, Maghreb Centres de Contacts, 2006-04-30). Call-centres play an important role by increasing the overall competence among young graduates in Morocco by acting as a springboard between University studies and a future career. Most importantly it can be an eye-opener to new possibilities. As most employees in call-centres see the job as a temporary activity, whatever skills and knowledge they have acquired during their employment period stay with them and are applicable in their future career. The possibility of familiarizing and becoming accustomed to working with computers and other types of technology is important as such skills can always be applied in future jobs as well as in other situations.

### **Spillovers through competition**

There do not seem to be any clear spillovers through competition even though the foreign presence is strong and the sector is concentrated with relatively high entry costs. This contradicts many of the theories in the literature e.g. Karpaty (2005) and Lipsey (2002). There does not seem to be competition in the normal sense of the word among the call-centres in Morocco (various interviews). There is an abundance of human capital and clients wishing to outsource their activities from Europe are still plentiful. The call-centres that have closed down are very few and the trend is rather towards a strong increase of call-centres (various interviews).

However, with an increase in economic activity in Morocco and especially in Casablanca, office space is becoming increasingly expensive. Consequently, entry costs are rising at least in Casablanca. As a result other cities in Morocco are becoming increasingly popular as locations for call-centres. Therefore one effect is that call-centres in Morocco are forced to spread out over the country and locate in new areas in order to take advantage of the human resources. This is not really a sign of competition but rather a sign that the sector has great potential. As it seems now the market is far from developed and only in its early stages, and the full effects of the potential spillovers from competition are not yet visible. It is true that the salaries in the call-centres located in Casablanca are slightly higher than the salaries elsewhere in the country. This could have to do with the strong concentration of call-centres

in Casablanca and that this has forced the call-centres to offer slightly higher salaries to attract employees. It could, however, also be explained by the fact that Casablanca is the biggest city in Morocco and that the overall wages there are higher than in the rest of the country.

### **Spillovers through exports**

The majority of the call-centres located in Morocco are oriented towards exporting their services. As they are directing their services towards a foreign market they have to make certain efforts to adapt to and learn about this market. In short, call-centres have to make sure they have the specific skills i.e. language skills and sales techniques used in the specific country. Being an export-oriented call-centre therefore implies acquiring additional skills and this is often a part of the employees internal training and can be performed by external consultants e.g. Avaya-Sigmatel (SICCAM 2006). However, the skills used when focusing on an international market, as opposed to the domestic market, are similar, and it is therefore difficult to say whether the efficiency is higher among export oriented firms. Nonetheless, firms that are directed towards an international market have to compete with and live up to the standards of call-centres located in other countries. This encourages them to maintain a certain level of standard.

#### **5.4.2. Inter-industry spillovers**

The spillover effects addressed above are not always very clear. This has to do with the fact that a strong majority of the call-centres in Morocco are foreign or partly foreign. This drastically reduces the possibility of spillovers as spillovers are supposed to be transfers of knowledge and technology from foreign to domestic firms according to theory. With a limited number of domestic firms the spillovers in the theoretical sense are reduced. However, transfers of skills and technology to domestic firms or firms that are partly domestic take place.

One very important aspect is that this transfer is very seldom intra-industry i.e. a transfer between call-centres. However, inter-industry spillovers i.e. spillovers between different firms in the service sector do take place. As the call-centre industry is an industry that is dependent on technology solutions, e.g. Internet connections, telephone switches and satellite connections, a large number of companies offer these solutions. There are also several firms offering other services to call-centres e.g. help with the recruiting process and on the job

training. In addition, the call-centre industry has a positive effect on the real estate sector and on firms supplying office equipment (various interviews).

As some call-centres are externalisations of companies based in Europe these technology solutions and IT-services are often already available and just have to be transferred and adapted to Morocco. For the call-centres that are not an externalisation these services and solutions are still available from a large number of companies, as long as they are paid for. The call-centre will employ the services from the company that can offer suitable solutions for their specific call-centre.

This implies that there is a difference between the traditional manufacturing sector, where factors such as firm specific knowledge are an important part of the industry, and the service sector, where knowledge and technology are more freely available. The transfer of knowledge and technology was much more closely guarded and the channels through which a transfer was possible were much more clear in the manufacturing sector. Looking at the call-centre industry there is no such thing as firm specific knowledge. All technology and knowledge that could be considered useful are available through external firms that offer their services and solutions. Managing a call-centre in Morocco does not require great technological knowledge and most managers and directors are not very interested in knowing how the technology works, but more interested in the fact that it works (various interviews). They just look for a company that can offer a solution that is suitable to their needs and then pay for that service.

With an increasing number of call-centres in Morocco the demand for various technology solutions and services e.g. phone operators, network servers and telephone switches increases as well. As the demand for these services increases the number of firms offering these services also increase their presence in Morocco. The technology and services offered by these firms are available to any company willing to pay for the services. This means that domestic firms active in completely different sectors have the opportunity to take advantage of technology solutions and services that were previously unavailable in Morocco. With a more widespread supply prices are also becoming more moderate (SICCAM 2006).

One example where e.g. technology solutions can be useful in other sectors is the possibility for hospitals in Morocco to install phone switches in order to better handle incoming calls

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(SICCAM 2006). Other services include the possibility of tailoring the recruiting process for different companies and sectors in order to attract and employ the most appropriate candidates. Although this is a service that is available to all firms in Morocco it is thus far only foreign firms that tend to employ it (Patrick Etter, Swiss Contact Center Association, 2006-05-20).

It seems as if the installation of call-centres in Morocco has attracted a number of additional firms to the Moroccan service sector that offers various solutions and services. These solutions and services were initially directed towards the growing call-centre industry, but over time they will most likely come to play an important part in the development and increased efficiency of other industries as well.

## 6. Summary and policy implications

The Moroccan call-centre industry is a recent phenomenon that has experienced a strong growth. While the industry is still in a developing stage the impact on the Moroccan economy is evident. The strong influence of foreign firms in the sector has contributed to setting the standards and developed the sector into a competitive actor on the global market. While the spillovers from a theoretical point of view are limited, due to a limited number of domestic firms in the sector, the spillovers that seem to be the most important are the spillovers resulting from skills acquisition. The human resources are the most important ingredient in the success story of call-centres in Morocco, and the transfer of knowledge and skills to young employees seems to constitute the most important positive effect from the foreign presence in the sector. The creation of employment opportunities for young graduates is also the most apparent positive effect on the domestic economy. The opportunity to gain valuable working experience for young graduates has proved important and the call-centre sector acts as a springboard between studies and a professional career. The call-centre sector also has an important impact on other sectors of the Moroccan economy through inter-industry spillovers. Most significant are the effects on other sectors in the service sector e.g. real estate, suppliers of technology solutions, IT-services and office equipment. However, the spillover effects in the service sector seem to follow different channels to those in the traditional manufacturing sector. Information and technology seem to be more freely available as long as they are paid for. This is in many ways different from the manufacturing sector where firm specific knowledge constitutes an important advantage and the possible channels through which technology can be transferred are more clear.

It can be argued that the liberalisation of the Moroccan economy and the policies implemented by the government to encourage FDI have had positive effects on the domestic economy. Through investment incentives foreign investors have been attracted to the Moroccan economy and its comparative advantages. With its skilled and abundant labour force together with its well-developed technology infrastructure the country is well suited for call-centres. The increasing number of call-centres has attracted a growing number of companies offering various technology solutions and IT-services to Morocco. These firms not only supply the call-centres with their services but also offer Moroccan companies in other sectors a possibility of increasing productivity and efficiency by employing their services.

## Spillover Effects of FDI in the Service Sector in Morocco -A Case Study of the Emerging Call-Centre Industry-

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While it is still too early to study any clear effects on different domestic sectors as a result of the call-centre industry, it is evident that investments in the service sector have increased considerably in recent years. This finding is consistent with the global trend that is experiencing a shift in FDI flows towards the service sector. It can therefore be argued that policies implemented by Morocco have spurred the development of the service sector and increased FDI inflows.

In order for the call-centre industry to develop and for spillovers to increase, Morocco has to encourage domestic call-centres and domestic entrepreneurs. Foreign firms heavily dominate the sector and Morocco would benefit from an increased number of domestic firms. The promotion of Morocco as a call-centre country should continue, and it is already the most popular call-centre country in Africa. With its well-established reputation as a country with skilled labour and a preferential investment climate, Morocco can develop by attracting additional firms to the IT-sector. It should also continue to encourage domestic companies to offer advanced technology solutions and move into sectors that are not yet developed in Morocco. This has to be done through a close cooperation with education institutions and universities. It is important that the higher education offered in Morocco is competitive on a global level and also demanded on the domestic market. Through a close cooperation with the European market Morocco should be able to develop additional sectors of its economy, which should benefit the economy. It seems that the most important task is to support domestic firms in order to increase their presence in the local economy. However, the lack of studies and research in the specific field of spillovers in the service sector makes it difficult to draw any definite conclusions and further examination of the dynamics of spillovers in the service sector is necessary.

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