ASSESSMENT OF FDI INCENTIVES IN EGYPT

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Abstract

The paper tests the hypothesis that the FDI incentives scheme that Egypt chose to adopt since the open door policy in 1974 did not have a significant effect on the volume of FDI inflows attracted to Egypt and placed budgetary burdens on the Egyptian tax-payers. The paper quantitatively estimates the effect of the incentives offered by Egypt to foreign investors in Law 8/1997, on the incremental increase in FDI inflows to Egypt and on the cost born by the budget to support these incentives. It is concluded that the policy on FDI in Egypt should have focused on deriving macroeconomic benefits from FDI rather than on attracting the FDI. Offering incentives, especially tax incentives, is not the way out to more benefits, but improving the availability of sufficiently qualified labor, focusing on the establishment of sound institutions, and opening up to international trade will make Egypt’s locational characteristics more favorable to potential investors.
1. Introduction

Foreign direct investment (FDI) has dominated economic literature, especially in the developmental areas of economics, over the last thirty years. The importance of FDI has also increased in the 1990s with the globalization of the international economy and was considered, by many economists, to be one of the leading motivations for this dominance. FDI has attracted particular attention in emerging-market countries owing to their low domestic saving rates and/or the inefficient financial intermediaries which hinder strategies to finance growth thus creating a need for external financing, as they face the drying-up of the other forms of external financing (bank lending, official grants, etc.) and the concerns associated with high risks portfolio investments made clear during the Asian financial crisis 1997-98. In addition to the potential benefits and spillovers associated with FDI it might act as a trigger for transfers of technology and know-how; assist enterprise development and restructuring, not the least in connection with privatization; contribute to fuller international trade integration; bolster business sector competition; and support human capital formation in the host country. Thus, emerging countries became eager to attract FDI to meet their investment needs, and contribute to their development due to the potential economic growth and increased integration into the world economy that FDI is deemed to offer. This widespread acceptance of the policy tenets of FDI has increased both temptation and pressure to fully liberalize FDI regimes, consequently leading countries to rapidly change FDI regimes in favor of attracting more FDI flows and to offer a wide-range of incentives to affect the size and location of FDI.

Offering foreign investors investment incentives in general and tax incentives in particular to attract FDI was a debatable issue. On the one hand, some economists argued that incentives increase the total flow of new investment; that is, investments will be made that would not be made in the absence of incentives. In addition if a government of alternative locations competing for foreign investors offer incentives, then the government eager to ensure that it gets the investment must match those incentives or face the prospect of losing investments to the competing territories. This might be true even if the investor would, in the absence of any incentive, make the investment somewhere in the region. Thus, in somewhat more abstract terms, the two general arguments are as follows: first, incentives increase the aggregate of foreign investment available to developing countries; and second, incentives can affect the spatial distribution of investment, even if the first argument does not stand up. On the other hand, arguments were made against investment incentives on the basis that incentives have little, if any, effect on the total foreign investment that is made worldwide, and thus in the aggregate, incentives create a net transfer from taxpayers (or, in the case of indirect subsidies such as protection from imports, from consumers of the relevant product) to investors. In the case of foreign investors in developing nations, this transfer is primarily from a poor country to a richer one. The second argument is that even if the first argument does not fully stand up (that is, because incentives do increase the total investment worldwide), the cost to the public for incentives exceeds the additional benefits that are created by the investment that would otherwise not occur.

Analysts who support these arguments against investment incentives maintain that even if incentives do affect the spatial distribution of investment, the answer is not for governments to compete with one another in offering incentives (an “everyone loses” proposition) but, rather, for governments to establish agreements among themselves not to offer incentives at all. They may even agree to eliminate tax incentives unilaterally, since their costs are so high.

Despite such a wavering debate among economists on the benefits of incentives, empirically, countries continue to offer incentives to attract FDI.
Egypt did not divert from that trend; with low savings rates and sluggish exports performance, Egypt had offered incentives to promote FDI since the adoption of the open door policy in 1974, and aimed at attracting FDI to finance its investment needs and contribute to enhancing its economic growth, which is the focus of the current paper.

However, it is important to assess the effectiveness of these incentives that Egypt offers, as this has significant policy consequences; if the FDI attracted to Egypt, or at least the majority of it, could be attributed to these incentives without a burden on the fiscal budget, then incentives should be welcomed and promoted without restriction. If, on the other hand, incentives do not exert a positive impact on attracting, then there should be no tax incentives or any other form of subsidies or promotion schemes to further attract FDI and these public resources are better used to benefit the national economy.

Due to the importance of the issue for Egypt and the significant policy implications it has, and the inexistence of a consensus among economists regarding the matter, in addition to the scarcity of studies covering the subject in Egypt; this paper attempts to estimate the costs of FDI incentives on the fiscal budget in Egypt.

The paper tests the hypothesis that the FDI incentives scheme that Egypt chose to adopt since the open door policy in 1974 did not have a significant effect on the volume of FDI inflows attracted to Egypt and placed budgetary burdens on the Egyptian tax-payers. The paper quantitatively estimates the effect of the incentives offered by Egypt to foreign investors in Law 8/1997, on the incremental increase in FDI inflows to Egypt and on the cost born by the budget to support these incentives.

The paper continues as follows, section two gives a critical review of the FDI legal context or framework within which FDI is admitted and regulated in Egypt; that is, the FDI regime applied by Egypt; an analysis for the FDI incentives offered to foreign investors by Egypt outlining the incentives offered is given in section three, section four is focused on analyzing the FDI developments throughout the period of the study, i.e., 1974-2004. in terms of the realized FDI inflows to Egypt, and their relative shares in domestic aggregates, Egypt’s share of FDI inflows in the world as well as in the MENA region, while section five provides the estimation of the outcome of the FDI incentives, both from the revenue and cost sides. The paper ends with a conclusion that summarizes the main results of the study.

2. FDI Regime in Egypt: A Critical Review

By the FDI regime we mean the legal context or framework within which FDI is admitted and regulated in a country. Such a regime includes a list of constitutional provisions, laws, regulations, policies and practices that establish and define the rights and obligations of the foreign investors as well as the host recipient country. (DEPRA 1997: 23). Broadly, FDI regimes address four issues: admission, treatment, expropriation, and dispute resolution.

There are two types of FDI regimes: open regimes which do not state any special restrictions on foreign entry or any other constraints on foreign ownership and operations beyond internationally recognized public order considerations like public health, environment, morals, etc.

The other type of FDI regime is the authorization regime where all or some of the foreign investors are screened according to some special criteria before allowing/refusing their admission. Authorization regimes also grant incentives based on some specifics and in some cases to some investors, according to a stated criterion, and in some cases with no clear criteria on a case-by-case basis, which leaves a big room for inconsistency and unpredictability.
The Egyptian FDI regime can be categorized under the authorization regimes with twenty different laws governing the private investment operations in Egypt, nine of which directly affect the FDI.

The most important two laws that affect FDI in Egypt are the Companies Law 159/1981, and the Investment Law 8/1997. The Companies Law is Egypt’s corporate formation/establishment/registration and regulation law, with some few investment incentives, while the Investment Law provides for the investment incentives for companies whether domestic or foreign.

The following study reviews the FDI regime in Egypt with its four above-mentioned components as they are stated in the Companies Law 159\(^1\) and the Investment Law 8.

2.1 Admission
This is the legal process through which FDI is legitimized within a country’s sovereignty; it is also called Establishment in some studies. FDI admission can be formal, i.e., going through a formal process for screening, approving, and regulating FDI under legal norms and administrative procedures established in the FDI regime, the formal admission can state some requirements for FDI establishment that relates to the country’s economic needs and geographical and sectoral distribution of projects. Admission can also be informal, with no particular legal process for FDI needed for its establishment.

Egypt has a prolonged admission process that can take, according to some estimates\(^2\), between 70 to 130 days, as compared to one to three days in Tunisia, few days in Israel, two to four weeks in Morocco and four to six weeks in Turkey (DEPRA 1997).

2.2 Treatment
Treatment refers to the way FDI is treated in a country. The most important issue within the treatment frame is the national-treatment of foreign investments and the availability of profit repatriation to the investing countries of origin.

Foreign firms in Egypt, under investment Law 8/1997, receive equal treatment with domestic firms in all aspects, including owning land, and unrestricted ownership of invested capital. That is the case except for some strategic industries, e.g. arms industry, where foreign participation is prohibited. Another issue of importance with regards to the treatment of FDI is the repatriations of profits and capital which is permitted under the Egyptian law. However, any provisions guaranteeing the right of foreign firms to freely repatriate capital is precluded and is considered to be a drawback by some analysts.

On the other hand, if foreign investors choose to operate in the country under the jurisdiction of the Companies Law 159, there are certain requirements that discriminate against foreign investors. Examples on this are the articles and provisions in the Law that requires that foreign companies established under this law should offer at least 49% of the companies’ shares to Egyptians within a one month period of establishment, the majority of the Board of Directors (BOD) have to be Egyptian. And if the ownership majority is for foreigners, the workers must be represented in the BOD. In addition, the law prohibits foreign firms, operating under its jurisdiction, from owning land and requires that 10% of the profits should be distributed to the companies’ employees, with an upper limit equal to one-year salary.

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\(^1\) Most foreign companies choose to operate under the jurisdiction of Investment Law 8 rather than the Companies Law 159. Only 6% of foreign companies operated under the jurisdiction of the Companies law. GAFI 2003

\(^2\) DEPRA 1997 and Abdel Latif 1998
2.3 Expropriation

Expropriation is the nationalization of property or the taking of property belonging to the foreign investor, leaving the investor’s legal rights up for review or arbitration or in some cases, compensation. The Companies Law and the Investment Law clearly state that approved projects cannot be nationalized, expropriated or confiscated.

2.4 Dispute Resolution

Dispute resolution refers to the process and procedures that the foreign investors have to go through to settle any disputes in the host country either with its government or public agencies, or the private sector. In this regard, no special procedures are required from foreign firms to settle any disputes, and the disputes, if any, are governed by the Civil and Commercial Codes.

From the above review of the FDI regime in Egypt, we observe that the admission part of the regime presents obstacles when compared to some selected MENA emerging-market countries. This is consistent with the observation in the second part of the study that when benchmarked internationally starting a business and registering property, which fall under the admission, are the areas with the most comparative complications in Egypt. We turn now to the investment incentives offered by Egypt to affect the size and location of the FDI inflows to the country.

3. FDI Incentives in Egypt

The incentives offered by countries for FDI are defined as “… measures designed to influence the size, location or industry of a FDI investment project by affecting its relative cost or by altering the risks attached to it through inducements that are not available to comparable domestic investors…” (OECD 2003 p.9)

These incentives are either fiscal inducements, financial subsidies or regulatory exemptions. Fiscal inducements include tax holidays, customs/tariffs exemptions or drawback, and operation in free zones. The financial subsidies can take the form of direct government loans or loan guarantees to foreign investors, export financing, and debt/equity conversion possibilities while regulatory exemptions mean derogations from regulation offered to foreign-owned enterprises with the purpose of making them willing to invest.

According to the above-mentioned types of FDI incentives, we review the range of incentives offered by Egypt.

3.1 Fiscal Inducements

Fiscal inducements are the basic incentives that Egypt offers. Investment Incentives Law 8/1997 offers inland investments a five year period for most industrial projects with a possibility of another five-year tax holiday extension on distributed profits, plus two additional years if over 60% of the machinery used is locally-made. In addition, distributed profits are exempt from taxation, and projects are exempt from the stamp tax and national fees. However, an important limitation to these incentives is the condition that income tax holidays are NOT operative if the non-taxed income will be taxed in the foreign companies’ home country, or any other country to which such income will be transferred.

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3 FDI-incentives are basically regulated under Law 8/1997, while the Companies Law 159/1981 offers few incentives.

4 Inland Investments are essentially industrial investments in the domestic economy

5 Egypt signed and ratified treaties for the avoidance of double taxation with Austria, Canada, Cyprus, Denmark, Finland, France, Germany, India, Indonesia, Iraq, Japan, Libya, Malaysia, Norway, Oman, Pakistan, Romania, Sudan, Sweden, Switzerland, South Korea, Syria, Tunisia, UK, and the USA
Egypt also offers the option of operating in the free zones for foreign companies with zero income taxes, however, these projects are subject to a one percent fee on goods entering or leaving the free zone, except when they are on a transit-basis.

Exporting companies enjoy an additional incentive of the availability of the tax rebate and drawback schemes, whether foreign or domestic.

It is important to mention that several studies (Hines 2000 and Hines and Gordon 2002) find that the pattern of financing from the parent company to the affiliate company depends on the tax rate in the host country. In case of high rates of corporate taxes, the parent company uses debt to finance its affiliate to increase the interest payment, and thus reduce the taxable income, while in the case of low corporate tax rate, parent companies inject new capital into their affiliate. Many countries that give tax exemption incentives for a period of time have put limits on the interest payments that local affiliates pay to the parent company to prevent tax evasion after the end of the exemption period. In the case of Egypt however, no such measure is taken.

Fiscal inducement incentives offered by Egypt are not related to any goal other than for investing in the free-zones and in exports (in the case of the drawback and tax rebate schemes). Other than this no developmental goals or goals related to employment, or transfer of know-how, for example are realized as benefits from FDI.

3.2 Financial Subsidies

No financial subsidies are available as an incentive in Egypt, except in foreign investments related to the Egyptian privatization program; the government offers potential investors the transfer of outstanding debts to banks as well as other liabilities on the company’s books under sale to its Holding Company.

3.3 Regulatory Exemptions

The only regulatory exemption available to foreign companies is through the free zones where the investment incentives law allows foreign firms operating in the free zones exemption from the Labor Laws articles, except where the minimum wage and benefit requirements are concerned.

These are the descriptions of the incentives offered by Egypt. Their effectiveness needs to be assessed, but before this is done, this study briefly reviews the FDI development in Egypt over the period of 1974-2003.


The developments of FDI inflows to Egypt are analyzed based on the trend of these flows into Egypt during the covered period, what Egypt’s position has been in the world with regards to FDI inflows, how this has changed over the period, and how Egypt performed in attracting FDI flows relative to other MENA countries.

4.1 Trend of FDI Inflows to Egypt

One of the most important factors behind adopting the open-door policy in Egypt in 1974, as well as embarking on the reform program since 1991 was to attract FDI. Such an intention by the government is not reflected in the FDI inflow figures to Egypt. On the contrary, the data show that throughout the period, and with the exception of a few years, Egypt was unsuccessful in attracting FDI. Since 1979, FDI inflows to Egypt hovered around an annual average figure of US $ 800 mn. The un-averaged data show year-to-year fluctuations in the FDI inflow figures, as seen in Figure 1.
The relative importance of FDI in relation to the domestic aggregates remained very low. When comparing FDI to GDP, we find that they are small in magnitude. The FDI/GDP reached its peak in 1979 amounting to 7%, while FDI/Gross fixed capital formation reached a high of 25% in the same year, however, the two ratios declined since then to reach a low of less than 1% in 2003, reflecting the diminishing role of FDI relative to domestic aggregates (Figures 2 and 3). This compares to world figures of 1.5% 7.5%, to China's figures of 3.8% and 12.5%, of FDI/GDP and FDI/gross fixed capital formation respectively in 2003.

4.2 Egypt’s FDI Inflows from a Global Perspective

Egypt’s relative share in the world FDI inflows have surged till it reached its peak in 1979, with a relative weight of 3% of total FDI inflows. This share, however, has declined since then to reach a mere 0.04% in 2003. The decrease in Egypt’s FDI inflows in absolute value and in its relative importance as an FDI receipt country is also obvious from its rank in the world, in 1979 Egypt was ranked the 7th country in attracting FDI while in 2003 its rank deteriorated to the 92nd level (Figure 4).

Another way to measure FDI in Egypt from a global perspective is to benchmark Egypt’s relative success in attracting FDI, using the UNCTAD developed two FDI indices; the Inward FDI Performance Index and the Inward FDI Potential Index. The former index ranks countries according to the FDI inflows they receive relative to their economic size, thus the index represents a ratio between the countries share in world FDI inflows divided by its share in world GDP. A value greater than one indicates that the country attracts more FDI in proportion to its economic size, a value below one shows that it receives less (a negative value indicates that foreign investors disinvested in that period) (Figure 5). Thus, a higher index implies success in the competition, explicit or implicit, to attract FDI (WIR 2004).

Ranked by the Inward FDI Performance Index in 2001-2003, Egypt’s position was at 123 out of 140 countries covered by the index, down from a ranking of 110 in 1999-2001, and down from number 14 in 1988-00. (WIR 2004).

The second index is the Inward FDI Potential Index, which consists mainly of structural variables, and is thus far more stable than the Performance Index.

Of the 12 variables comprising the Potential Index only country risk and, to a lesser extent, trade-related measures, tend to vary sharply from one period to the next. Thus, the correlation coefficient between the Potential Index values for the sample countries over previous years is high and rises steadily over time. This testifies to the structural nature of the measure.

Out of 140 countries, the Index shows that Egypt is positioned in the middle, with a stable ranking as the 70th country for 1999-2001 and 2000-2002. (WIR 2004).

A comparison between national performance according to the FDI Potential and Performance indices yields insights in terms of the factors that may cause a discrepancy between actual FDI inflows and the structural variables that affect FDI. Countries can be grouped according to a matrix divided into four quadrants:

- Front-runners: countries with high FDI potential and performance.
- Above potential: countries with low FDI potential but strong FDI performance.
- Below potential: countries with high FDI potential but low FDI performance.
- Under-performers: countries with both low FDI potential and performance.

By contrasting the two indices in the case of Egypt, we find that the country has a high potential of FDI coupled with a low performance, which places it in the below potential

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6 China is used as a reference for an impressive experience of attracting FDI
7 The index is calculated as a moving average.
group among countries. In policy terms, this means that Egypt is hitting below the mark in
drawing less FDI than its potential would justify. This points to the insufficiency of the
business environment, and the ineffectiveness of the incentives’ schemes, an observation that
is consistent with the previous analysis of both factors.

4.3 Egypt’s Position of FDI Inflows in the MENA region
The MENA group of countries is not one of the more highly successful countries in attracting
FDI. MENA countries’ share in the world total FDI inflows surge in the first half of the
1980s, probably related to high development and mega projects the region witnessed
following the oil boom of the 1970s. However, from the second half of the 1980s, the
countries’ share of world FDI declined continuously. Within the MENA region, Egypt’s
position has also deteriorated, with an average share not exceeding the 0.1% during the
period 2000-03 and down from an average annual share of around 1% during 1975-89
(Figure 6 and 7).

From the above trends we see that the growth of foreign direct investment (FDI) in Egypt has
been sluggish during the past 30 years, resulting in a decline in Egypt’s global ranking to 92,
and creating a gap between Egypt’s FDI performance and potential. The deterioration in
Egypt’s FDI was not only on the global level, but also within the MENA region; the picture
was not bright. To assess the effect of FDI incentives we need to estimate the amount of FDI
attracted due to the incentives offered by Egypt and to also estimate the fiscal costs of these
incentives. This is covered in the next section of the study.

5. Efficiency of FDI Incentives
There are many theoretical arguments for offering foreign investors investment incentives in
general and tax incentives in particular, but most of these arguments can be boiled down to
two categories: first, it is argued that incentives will increase the total flow of new
investment; that is, investments will be made that would not be made in the absence of
incentives. Second, it is argued that if governments of locales that are alternative locations
offer incentives to foreign investors, then that government, eager to ensure that it gets the
investment, must match those incentives or face the prospect of losing investment to the
competing territories. This might be true even if the investor would, in the absence of any
incentive, make the investment somewhere in the region. Thus, in somewhat more abstract
terms, the two general arguments are as follows: first, incentives increase the aggregate of
foreign investment available to developing countries; and second, incentives can affect the
spatial distribution of investment, even if the first argument does not stand up.

The main arguments made against investment incentives can also be boiled down to two. The
first is that incentives have little, if any effect on the total foreign investment that is made
worldwide, and thus in the aggregate, incentives create a net transfer from taxpayers (or, in
the case of indirect subsidies such as protection from imports, from consumers of the relevant
product) to investors. In the case of foreign investors in developing nations, this transfer is
primarily from a poor country to a richer one. The second argument is that even if the first
argument does not fully stand up (because incentives increase the total investment
worldwide), the cost to the public for these incentives exceeds any additional benefits that are
created by the investment.

Analysts who support these arguments against investment incentives maintain that even if
incentives do affect the spatial distribution of investment, the answer is not for governments
to compete with one another in offering incentives (an “everyone loses” proposition) but
rather, for governments to establish agreements among themselves not to offer incentives at
all. They may even agree to eliminate tax incentives unilaterally, since their costs are so high.
To test the theoretical arguments empirically, many studies have been conducted to assess the effect of subsidies on FDI size and allocation. The empirical studies have used two different methodologies: surveys of investors and econometric tools. With respect to the former, one striking finding reported in several surveys is that there is a large discrepancy between the way investors view tax incentives and the way government officials view the same incentives; surveys of investors tend to rank incentives quite low as determinants of investment, while studies using econometric tools rank them high.

The econometric studies can be divided into two sets; the first is time-series estimation of the responsiveness of FDI to annual variation in after-tax rates of return in host countries. Studies of this type consistently report a positive correlation between levels of FDI and after-tax rates of return at industry and country levels. The other set of studies used are exclusively cross-sectional in nature, exploiting the very large differences in corporate tax rates around the world to identify the effects of taxes on FDI. This kind of econometric study provides ample evidence of the sensitivity of the level and location of FDI to its tax treatment.

Most econometric studies have found that the different FDI incentives, whether tax incentives, financial subsidies or regulatory exemptions directed at attracting foreign investors can not be substituted for pursuing the appropriate general policy measures and focusing on the broader objective of encouraging investment regardless of source. Nevertheless, incentives can act as a supplement to an already enabling and attractive environment for investment or can act as a compensation for proven market imperfections that cannot be otherwise addressed. (OECD 2003)

It is observed that studies of the importance of FDI incentives started to change during the 1990s. Until then, there was almost a consensus among economists that FDI was mainly attracted by strong economic fundamentals; market size and income level, with skills, infrastructure and other resources that facilitate efficient specialization of production, trade policies, and political and macroeconomic stability as other central determinants. Investment incentives, in all forms, were seen as relatively minor determinants of FDI decisions. While the literature accepted that they might affect the investment decision in favor of one of several otherwise similar investment locations, the effects were considered only marginal. Globalization has changed this picture and made incentives a more important determinant of international investment decisions, due to the increasing competition among countries to attract FDI and offer incentives for that purpose. (Kokko 2002)

The literature on FDI incentives also declares that the effectiveness of incentives differs among types of investors or investments. Location choices for export-oriented FDI are more likely to be affected by tax incentives than are those for foreign direct investments meant primarily to serve local domestic markets. An export-oriented FDI is more concerned with the cost structure of production in its investment location than with market-seeking and natural resource-seeking FDI.

Incentives may also affect location decisions when investors are choosing among locations that are approximately equal in terms of other factors that may affect their choices. In fact, sometimes equivalency in location and single market availability may combine to make incentives particularly attractive for one economic entity (nation or locale), even if their total investment flow does not increase.

Empirical tests also suggest that the home country tax policies affect the effectiveness of the fiscal inducements. If the home country designs policies to offset the tax savings created by incentives, then the tax incentives lose their effectiveness in determining and influencing the locational decision of investment. An example of this is in the United States, where taxes are applied to its investors on a worldwide basis and tax sparing provisions in treaties are rejected
to avoid double taxation thus causing tax incentives to be not such an important determinant for American investors.

From the results of the academic studies, it appears clear that FDI incentives are effective in the sense that they influence FDI flows thus supporting a theoretical argument by empirical evidence that Egypt had an economic theoretical foundation for relying on tax incentives. Yet, it is not obvious whether FDI incentives are also efficient, meaning that the costs for providing the incentives to Egypt are at least as large as the benefits. To explore the efficiency issue, and to give a complete assessment of the effectiveness of FDI incentives offered by Egypt it is necessary to consider the increases in FDI that can be attributed to FDI-incentives as well as the costs of these incentives.

5.1 Estimating the Effect of Incentives on the Incremental Increase in FDI

To estimate the effect of incentives on the incremental increase in FDI we use the tax elasticity of investment approach, which shows the responsiveness of investment to changes in the tax rate:

\[ \text{Tax Elasticity of Investment} = \frac{\% \text{ Change of Investment}}{\% \text{ Change of Taxes}} \]

We use the elasticity estimate of Hines’s (2000) which gave a figure for the tax elasticity of foreign direct investment of about -0.6.

“The implied elasticity of FDI with respect to after-tax returns is generally close to unity, which translates into a tax elasticity of investment of roughly -0.6. The estimated elasticity is similar whether the investment in question is American direct investment abroad or FDI by foreigners in the United States. . . “Implicit in this estimation is a q-style investment model in which contemporaneous average after-tax rates of return serve as proxies for returns to marginal FDI. In theory, these specifications should also control for after-tax rates of return available elsewhere, though in practice this is infeasible…” Hines 2000

Applying such an elasticity estimate to Egypt, and on the following assumptions:

<table>
<thead>
<tr>
<th>Variable</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corporate Tax Rate</td>
<td>40%</td>
</tr>
<tr>
<td>Exemption Period</td>
<td>10 years</td>
</tr>
<tr>
<td>Life cycle of the corporation</td>
<td>20 years*</td>
</tr>
<tr>
<td>Tax Elasticity of Investment</td>
<td>-0.6</td>
</tr>
</tbody>
</table>

Based on these assumptions, we calculate the Average annual tax rate at 20%, versus a 40% tax rate had there been no exemptions, a discount rate to calculate the net present value of 10%, and by applying the -0.6 tax elasticity of investment, we estimate that the tax holidays were responsible for attracting 43.3% of FDI inflows to Egypt.

That is on the benefit side of the tax holidays, however, that is not enough for designing an investment promotion policy. To give a complete view on the effectiveness of the tax incentives, we have to calculate the cost of these incentives to the budget, which is the focus of the next section.

5.2 Estimating the Costs of Incentives

To estimate the costs of the incentives offered by Egypt, the paper studies the costs of redundant incentives.

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*The more the life of the corporation is the less the incremental increase attributed to the tax exemption will be.*
Costs of Redundant Incentives

As far as the fiscal budget is concerned, providing tax incentives can be equated to granting a direct subsidy, in case of if a percentage of the foreign recipients of the incentives would have invested in the country regardless of the existence/absence of the incentives.

An estimate of the subsidy can be calculated by allocating the foregone revenue from firms that would have come anyway to the projects and that would not have come without the incentives.

Tax Holidays to Attract Foreign Direct Investment

As a result, the analysis should start by estimating the redundancy rate before estimating the cost of incentives. The simplest definition of the redundancy rate is the percentage of investors receiving tax holidays that would have invested in the country even if they had not been granted incentives. If tax incentives are given only to investors who would not otherwise have allocated their investments in the incentives-granting country, and are exactly the amount required to attract them, then there is no revenue loss from the incentives-zero redundancy. On the other hand, if incentives go to investors who would have invested in the country no matter what the incentives were/were not, there is redundancy and the foregone revenue from those redundant incentives represents a cost to the treasury. That cost is equivalent to a subsidy to attract the incremental investors. (Wells et al 2001)

There is likely to be an additional source of redundancy as well. If incentives to some investors whose decisions are influenced by the them exceed the amount required to attract them, the increment is also a cost to the economy.

Despite the simple definition of the redundancy rate, in practice, determining the redundancy rate and calculating the costs are not easy. Estimating relationships between redundancy rates and subsidy equivalents is, however, simple.

The Assumptions

Let’s assume for the time being that there are no excess incentives given to those investors whose decisions are indeed driven by tax holidays.

In that case, let

\( t \) equal the tax rate,
\( Y \) equal the investor’s average return, based on the rate of return on equity (ROE)
\( R \) equal the redundancy rate (the fraction of investors who would have come without incentives),
\( N \) equal the number of years of tax holiday, and
\( I \) equal total foreign investment

Then the tax unnecessarily given up to the foreign investor is

\[ \text{UnnecessaryTaxExemption} = R \times I \times Y \times t \times N \]

The incremental investment attracted is:

\[ \text{IncrementalInvestment} = (1 - R)I \]

Thus, the subsidy as a fraction of the incremental investment attracted is:

\[ (R \times I \times Y \times t \times N)/(1 - R) \]

Or it can be rewritten as follows

\[ R[(Y \times t \times N)/(1 - R)] \]
The calculations could, of course, be refined by discounting future foregone tax revenues by an appropriate rate to arrive at a net present value (NPV)\(^9\).

In what follows we calculate the subsidy equivalents based on different assumptions for the redundancy rates and the ROEs of the foreign companies operating in Egypt.

Tables 1 should be read as follows: if projects have a 20% return on assets and if the redundancy rate for tax holidays is 50%, then the tax holidays are equivalent to a subsidy of 80% of the value of incremental investment attracted.

In case of the tax reduction that is currently discussed by the People’s Assembly, that reduces the corporate tax rate from 40% to 20%, the new calculations will be as shown in Table 2.

In the last section we estimated the incremental increase in FDI owing to the tax exemption at 43.3%, and since practically every foreign investment received tax incentives, we can estimate the redundancy rate at 56.7%. This figure is not far from Wells et al 2001 who measured the redundancy rate in Indonesia and cited other researchers’ efforts in calculating the figure for Thailand, and they estimated it to be hover around 70% of total FDI (Wells et al 2001: 24).

Based on the Financial Statistics and Indicators of Organized Private Sector Companies data provided by the Central Authority for Public Mobilization and Statistics (CAPMAS)\(^10\).

We calculated the redundancy rate for Egypt, and calculated the ROE of foreign companies in the manufacturing sector in Egypt. Rough calculations of an estimated Income Statement for foreign companies operating in the manufacturing sector in Egypt, the ROE was calculated at 18%, With a redundancy rate of 56.7%, the subsidy funding that burdens the Egyptian fiscal budget would account to 94% of all incremental FDI attracted by Egypt. This means that due to the tax incentives it offers the subsidy funding Egypt is burdened with, is almost equivalent to the incremental FDI attracted, which is a huge subsidy by all standards. This of course casts much doubt on the effectiveness of the tax incentives.

We can also conclude from the above calculations that the tax cut that is supposed to take place in Egypt will reduce the effect of the subsidy equivalent tax exemption burden. In the case of a similar ROE rate of 18% and a redundancy rate of 56.7, the subsidy would only equal 47% of the incremental FDI attracted by Egypt\(^11\).

One stark conclusion that arises from the above calculations is that tax incentives can result in a net balance of payment outflows, if tax savings are remitted abroad—a perverse result indeed, in cases when the subsidy exceeds 100% of incremental investment.

These figures should not be taken as exact calculations, rather they are rough estimates to give an indication of the cost of offering tax incentives to foreign investors. Even if the few existing estimates of redundancy rates are too high by a considerable margin, the calculations suggest that the costs of tax holidays are extremely large. No doubt, if the costs of tax holidays were regularly presented as direct subsidy equivalents, they would receive much less support than they currently enjoy.

It is also important to keep in mind that these are not the only costs of incentives, as there is also the possibility of eroding the broader tax system and diverting the policy makers attention away from more effective and less costly ways of attracting investments, whether foreign or domestic.

\(^9\) The discount rate that shall be used in this study is 10%
\(^10\) The financials are presented in the Annex
\(^11\) The cost is calculated for foreign investors only, although domestic investors also receive the same tax holiday, however, the current study is only concerned with FDI.
In a nutshell, it seems that the FDI incentive schemes that Egypt depended upon did not result in an increase in the incremental investment that justifies the foregone tax revenue for the country’s fiscal budget. The figures presented highlight that when deciding to engage in incentive-based strategies, the government faces the important task of assessing these measures’ relevance, appropriateness and economic benefits against their budgetary and other costs, including long-term impacts on domestic allocative efficiency, and to conduct reviews at regular intervals.

**Conclusion**

The current paper focused on analyzing the effectiveness of FDI incentives in Egypt under Law 8/1997. The analysis showed that the FDI incentive schemes that Egypt depended upon did not result in enough of an increase in the incremental investments that justifies the foregone tax revenue for the country’s fiscal budget, which raises the need for assessing the relevance of FDI incentives against their budgetary and other costs, including long-term impacts on domestic distributive efficiency, and to review this at regular intervals.

Thus we can conclude that the policy on FDI in Egypt was focused on the wrong question. The challenge is not to attract FDI, but rather to derive macroeconomic benefits from FDI, and that is done not by offering incentives, especially tax incentives, but by making Egypt’s locational characteristics more favorable to potential investors by improving the availability of sufficiently qualified labor, by focusing on the establishment of sound institutions, and by opening up to international trade.
References
Abdel Latif, Lobna, 1999. Global Trade Patterns, Foreign Direct Investment and Egypt's Export Strategy, USAID, Cairo, Egypt
Central Agency for Public Mobilization and Statistics (CAPMAS), Financial Statistics and Indicators of Organized Private Sector, several issues.
Chang, Ha-Joon, 2003. Foreign Investment Regulation in Historical Perspective- Lessons for the Proposed WTO Agreement on Investment, Faculty of Economics and Politics, University of Cambridge
General Authority for Investments (GAFI), 2004. unpublished data, Cairo, Egypt.


UNCTAD website, www.unctad.org


World Development Indicators CD-Rom, 2003.

Figure 1: Realized FDI inflows to Egypt: 1974-2003

![Graph of Realised FDI Inflows to Egypt 1973-2003](image)

Source: UNCTAD website, www.unctad.org

Figure 2: FDI Inflows to Egypt as % of GDP (1973-2003)

![Graph of FDI as % of GDP in Egypt 1973-03](image)

Source: UNCTAD website, www.unctad.org
Figure 3: FDI Inflows to Egypt as a Percentage of Gross Fixed Capital Formation 1973-2003

Source: UNCTAD website, www.unctad.org

Figure 4: Egypt's shares in FDI inflows in the World (1975-2003)

Source: UNCTAD website, www.unctad.org
Figure 5: Egypt's FDI Performance and Potential Indices (1988-03)

![Graph showing Egypt's FDI Performance and Potential Indices (1988-03)](image)

Source: WIR 2004

Figure 6: MENA Countries Shares in the World Total FDI inflows (1975-03)

![Graph showing MENA's Share in the World Total FDI Inflows 1975-2003](image)

Source: UNCTAD website, www.unctad.org

Figure 7: Relative shares of FDI inflows to Egypt within the MENA Countries (1975-03)

![Graph showing Egypt's Share in MENA Countries' FDI Inflows (1975-2003)](image)

Source: UNCTAD website, www.unctad.org
Table 1: Subsidy Equivalents, Using a 10-Year Tax Holiday, 10% Discount Rate, and 40% Tax Rate %

<table>
<thead>
<tr>
<th>Redundancy Rate</th>
<th>ROE</th>
<th>10</th>
<th>15</th>
<th>18</th>
<th>20</th>
<th>25</th>
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</tbody>
</table>

Source: Researcher's calculations

Table 2: Subsidy Equivalents, Using a 10-Year Tax Holiday, 10% Discount Rate, and 20% Tax Rate %

<table>
<thead>
<tr>
<th>Redundancy Rate</th>
<th>ROE</th>
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<th>15</th>
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</table>

Source: Researcher's calculations
Annex
Financials of a Foreign Company Operating in the Manufacturing Sector

### P&L for manufacturing sector

<table>
<thead>
<tr>
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<th>Values</th>
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<td><strong>Revenues</strong></td>
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<tr>
<td>Operating</td>
<td>7415035</td>
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<tr>
<td>Other revenues</td>
<td>1238087</td>
</tr>
<tr>
<td><strong>Operating Expenses</strong></td>
<td></td>
</tr>
<tr>
<td>Salaries and benefits</td>
<td>542454</td>
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<tr>
<td>Intermediates</td>
<td>5639384</td>
</tr>
<tr>
<td>- Goods1</td>
<td>5070102</td>
</tr>
<tr>
<td>- Services</td>
<td>569282</td>
</tr>
<tr>
<td>Depreciation</td>
<td>381092</td>
</tr>
<tr>
<td>- M&amp;E</td>
<td>233200</td>
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<tr>
<td>- Others</td>
<td>147892</td>
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<tr>
<td><strong>Non-Operating Expenses</strong></td>
<td></td>
</tr>
<tr>
<td>Interest 2</td>
<td>453090</td>
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<tr>
<td>Others</td>
<td>976234</td>
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<td><strong>Total Expenses</strong></td>
<td>7992254</td>
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<tr>
<td><strong>Profits Before Taxes</strong></td>
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<tr>
<td>Taxes</td>
<td>20701</td>
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<tr>
<td><strong>Profits After Taxes</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>640167</td>
</tr>
</tbody>
</table>

Notes: ¹ Share of imported intermediates to total intermediates is 51 percent as calculated from the IO table 1991/92. ² Interest expenses is determined on the base of an interest rate on loans equal to 15%

Source: CAPMAS, Financial Statistics and Indicators of Organized Private Sector Companies, Several Issues

### BS for manufacturing sector

<table>
<thead>
<tr>
<th></th>
<th>Values</th>
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<tbody>
<tr>
<td><strong>Liabilities</strong></td>
<td></td>
</tr>
<tr>
<td>Equity¹</td>
<td>3,509,666</td>
</tr>
<tr>
<td>Provisions of which:</td>
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<tr>
<td>- Provisions for dep. of M&amp;E</td>
<td>1,698,275</td>
</tr>
<tr>
<td>- Provisions for dep. of other fixed assets</td>
<td>704,055</td>
</tr>
<tr>
<td>Long term loans</td>
<td>2,565,395</td>
</tr>
<tr>
<td>Short term loans²</td>
<td>2,839,192</td>
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<tr>
<td>Accounts payable</td>
<td>3,020,598</td>
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<tr>
<td><strong>Total Liabilities</strong></td>
<td>14,565,031</td>
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<tr>
<td><strong>Assets</strong></td>
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<tr>
<td>Gross fixed assets</td>
<td>6,013,649</td>
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<tr>
<td>- Machinery and equipment</td>
<td>3,550,893</td>
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<td>- Others</td>
<td>2,462,756</td>
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<tr>
<td>WIP</td>
<td>1,676,799</td>
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<tr>
<td>Inventories</td>
<td>2,675,000</td>
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<td>Financial assets</td>
<td>545,853</td>
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<td>Current assets</td>
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<tr>
<td>- Accounts receivable</td>
<td>2,323,169</td>
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<tr>
<td>- Cash</td>
<td>1,027,770</td>
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<tr>
<td>- Carried over deficit</td>
<td>302,791</td>
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<tr>
<td><strong>Total Assets</strong></td>
<td>14,565,031</td>
</tr>
</tbody>
</table>

Notes: ¹ Paid-up capital + reserves + carried over surplus. ² The share of short term loans in foreign currency in total short term loans is assumed to be 51%

Source: CAPMAS, Financial Statistics and Indicators of Organized Private Sector Companies, Several Issues
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