Foreign Direct Investment, Capital Outflows and Economic Development in the Arab World

Steve Onyeiwu

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Steve Onyeiwu, Ph.D.[*]

Abstract

There is some controversy about the role of Foreign Direct Investment (FDI) in the capital formation of developing countries. Some analysts have suggested that rather than mobilizing scarce capital for developing countries, FDI "decapitalizes" these countries by inducing excessive capital outflows. Despite the widespread acceptance of this claim, there is little systematic and empirical evidence that supports this notion, particularly from the point of view of the Arab world. This paper seeks to fill this vacuum by evaluating FDI outflows from the Arab world during the 1970s to the 1990s. In view of the wide variations in the extent and patterns of capital outflows from individual Arab countries, the paper investigates the macroeconomic determinants of capital outflows from the region. Using panel data from ten Arab countries, and the Seemingly Unrelated Regression technique, the following variables are found to have some influence on capital outflows from the region: exchange rates, the growth rate of real GDP, interest rates, the rate of inflation and net foreign assets. Specifically, currency depreciation and an increase in the rate of interest are found to be negatively correlated with capital outflows, while an increase in the rate of inflation in the previous year increases capital outflows in the current year. Surprisingly, increases in the rate of economic growth and net foreign assets tend to precipitate capital outflows from the Arab world. The paper finds anecdotal evidence that suggests, contrary to conventional wisdom, that capital outflows have no negative effect on economic growth in Arab countries.

في الجدل الدائر حول دور الاستثمار الأجنبي المباشر في التكوين الرأسمالي للدول النامية . يرى بعض المحللين أنه من الأفضل تحريك رأس المال النادر إلى الأقطار النامية، أي رسملة هذه الأقطار وذلك بالاغراء المفرط لتدفقات رأس المال. وبالرغم من القبول الشائع لهذا الادعاء، إلا أن الأدلة التي تدعم هذه النظرية أو الفكرة قليلة على الأقل من وجهة نظر العالم العربي . هذه الورقة تسعى لملء هذا الفراغ وذلك بتقييم تدفقات رأس المال المباشر من العالم العربي في فترة السبعينات والتسعينات. في ضوء الاختلاف الكبير في نطاق ونمط التدفقات الرأسمالية بين الأقطار العربية، فإن الورقة تبحث المحددات الاقتصادية الكلية للتدفقات الرأسمالية من المنطقة . باستخدام بيانات مقطعية من عشرة أقطار عربية وبتحليل هذه البيانات فقد وجد أن هناك متغيرات لها تأثير على التدفقات الرأسمالية إلى الخارج هي : سعر الصرف، معدل نمو الناتج المحلي الإجمالي، سعر الفائدة، معدل التضخم، وصافي الأصول الأجنبية. كما وجد على وجه الخصوص، أن تخفيض قيمة العملة وارتفاع سعر الفائدة لهما أثر سلبي على تدفقات رأس المال، بينما زيادة معدل التضخم في السنة الماضية سيزيد من التدفقات الرأسمالية في السنة الحالية . وعلى شكل مفاجىء، فإن زيادة معدل النمو وصافي الاحتياطات الأجنبية يعمل على تعجيل تدفقات رأس المال في العالم العربي . وقد خلصت الورقة إلى أدلة نادرة معاكسة للتوقعات النظرية، تفيد بأنه ليس هناك من أثر سلبي للتدفقات الرأسمالية على النمو في الأقطار العربية .

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Introduction

On their achievement of political independence in the 1950s and 1960s, many Less Developed Countries (LDCs) have aspired to promote economic development and structural change. In view of the abysmal levels of capital, technology, skills and infrastructures in these countries during the post-independence era, there has been a consensus among analysts that the LDCs should rely on either Foreign Direct Investment (FDI) or external borrowing to accomplish their development objectives. Apart from helping in mobilizing scarce capital, it is expected that the presence of FDI in the LDCs would create more and better quality jobs, facilitate the adoption and assimilation of modern technologies, and transfer managerial skills to the local population.

Almost four decades after their pursuit of economic development and reliance on FDI, questions are now being raised as to the extent in which FDI has helped the LDCS in, among other things, mobilizing scarce capital. Indeed, some analysts have suggested that rather than helping the LDCs mobilize capital, FDI contributes to capital shortages by precipitating the outflow of capital from developing countries. However, despite the widespread notion that foreign investors decapitalize their host countries, there are few systematic and empirical studies supporting such a claim, particularly from the point of view of the Arab world. It is a fact that popular media is replete with claims of massive outflows of petrodollars from the Arab world. However, the magnitude, causes and the strategies for ameliorating these outflows, are less obvious.

A major aim of this paper is to evaluate FDI outflows [1] from the Arab world. It aims to explore the following questions. Firstly, what is the magnitude and what are the patterns, of capital outflows from the Arab world? Secondly, what are the determinants of capital outflows from the region? In other words, are there idiosyncratic features of Arab economies that make them susceptible to capital flight? Thirdly, what are the implications of the current magnitude and patterns of capital outflows for the economic development of Arab countries? Finally, what are the appropriate policies for ameliorating these outflows?

Foreign Direct Investment, Capital Formation and Economic Growth

No aspect of the role of FDI in developing countries has been exasperating and controversial as the contribution of FDI to capital formation. For a long time, the conventional wisdom in the literatuare is that foreign capital helps in mobilizing scarce resources (particulalry capital, technology and management skills) for the host country [2]. Analysts have often used both the Dual Gap and Harrod-Domar [3] models toshow how foreign investors could mobilize capital and facilitate economic growth in LDCs.

According to the Dual-Gap model [4], FDI helps developing countries to fill the savings-investment gap and the foreign exchange gap that often prevent these countries from achieving a faster rate of economic growth. In notational terms, these may be written as:

$$FDI = I_d - S \qquad \text{Saving-Investment Gap} \qquad \text{(Equation 1)}$$
$$FDI = M - X \qquad \text{Foreign Exchange Gap} \qquad \text{(Equation 2)}$$

where: I_d = Domestic Investment
S = Saving
M = Imports
X = Exports

Given a country's current rate of saving and foreign exchange requirements, it may presumably induce the desired levels of FDI necessary to achieve a target rate of economic growth. The desired levels of FDI can be expressed as:

$$FDI_t - FDI_0 = I_d - S \qquad \text{(Equation 3)}$$

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[1] In this paper, FDI outflows and capital outflows are used interchangeably with capital outflows being associated with FDI. Thus, outflows of portfolio capital are not explicitly considered.

[2] See for instance Rosenstein-Rodan (1961) and Chenery and Strout (1966).

[3] For a summary of the Harrod-Domar model, see Todero (1997:72-75).

[4] The Dual-Gap model is analogous to the Capital Arbitrage Hypothesis (see Caves, 1982: 31-36) which argues that capital tends to flow to countries with small capital endowments, high marginal product of capital and high rates of return on capital. As capital moves to the capital-scarce economy, the rental cost of capital falls continuously while the wage rate rises. This process continues until the rental costs of capital in both the capital-exporting and capital-scarce economies are equalized.

$$FDI_t - FDI_0 = M - X \hspace{4cm} \text{(Equation 4)}$$

where: FDI_t = Required foreign investment in year t
FDI_0 = Required foreign investment in the base year.

Analysts have, however, questioned the empirical validity of the Dual-Gap model. Lall and Streeten (1977: 40-41), for instance, argue that given the risk of nationalization and expropriation, transnational corporations prefer to invest only a tiny amount of their capital in the host country and to raise the bulk of their capital locally [5] The authors point out that within the period 1966-1970, the amount of equity investment by US multinationals was just about 12% of the total expenditures on investment and remittances, and that 35% came from local borrowing, 27% from profits and 26% from depreciation allowances. Dunning (1981: 221) also argues that the proportion of FDI in capital formation worldwide was about 35% during 1957-1960, and fell to 22% in 1967-1970 and 20% in the mid-1970s. It was a mere 11% during 1975-1978.

Evidence from the Arab world suggests that the contribution of FDI to capital formation in the region has been very marginal. Table 1 shows inward FDI as a percentage of gross fixed capital formation in selected Arab countries between 1987 and 1997. It may be seen from Table 1 that FDI as a percentage of gross fixed capital formation ranged from a low average of 0.7% to a high average of 5.1% during 1987-1997. Only in a few countries, i.e. such as Tunisia and Yemen, did the percentage exceed 10% in a couple of years. Generally, the percentage has tended to be below 5% for most Arab countries [6].

Beyond the issue of statistics however, is the more fundamental question of whether an increase in the share of FDI in the fixed capital formation of Arab countries would significantly alter their growth path. Borensztein et al. (1995: 3) believe that an increase in the stock of FDI typically accelerates economic growth by virtue of its "crowding-in" effect on domestic investment. They find that a one-dollar increase in the net inflow of FDI results in an increase in total investment in the host economy of more than one dollar. With regard to the Arab world, a United Nations study (1999: 192) on the effects of FDI on domestic investment in selected Arab countries finds crowding-in effects in Oman and Saudi Arabia, and neutral effects (i.e., a dollar of FDI results in a dollar increase in total investment) in Morocco, Tunisia, Egypt and Jordan. According to the study, in no Arab country did FDI result in the crowding-out of domestic investment.

Table 1. Inward FDI Flows as a Percentage of Gross Fixed Capital Formation in Selected Arab Countries: 1987-1997

Country	1987-1992 (Average)	1993	1994	1995	1996	1997
Algeria	--	-0.5	0.2	-0.2	3.6	5.1
Egypt	4.4	5.3	11.9	5.3	5.1	6.1
Libya	1.4	0.8	1.9	0.2	5.7	0.3
Morocco	3.8	8.1	8.8	4.7	5.0	15.6
Tunisia	5.8	13.7	10.2	6.1	5.3	7.3
Bahrain	6.9	-0.4	-2.7	-2.7	6.2	3.4
Jordan	1.8	-1.8	0.1	0.7	0.8	20.3
Kuwait	0.2	0.3	--	0.2	8.4	0.5
Lebanon	0.5	0.4	1.8	1.5	4.3	10.8
Oman	6.8	6.5	3.8	2.2	2.9	1.3
Qatar	0.9	5.4	7.3	5.0	2.1	3.1
Saudi Arabia	-0.2	5.2	1.6	-8.1	-4.7	11.0
Syria	1.4	1.8	1.9	0.7	0.6	0.6
UAR	0.8	4.1	0.6	3.7	1.2	0.9
Yemen	29.9	27.7	0.2	-9.5	-4.1	-10.5
Average	4.6	5.1	3.4	0.7	2.8	5.1

Source: United Nations, *World Investment Report*, 1999: 502-508.

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[5] See also Caves (1982: 272) and Dunning (1981: 221).
[6] Rahnema (1990: 296) has shown that FDI has historically contributed a small percentage to cumulative gross fixed capital formation. He also observes that the percentage tended to decrease as the amount of domestic capital formation rose. While in 1969, FDI constituted over 10% of the manufacturing fixed capital formation, in 1975, it was only 1.9%.

The crowding-in effect has been questioned by analysts who contend that by reducing the rate of return on capital, FDI reduces the rate of saving, and hence, the growth rate of the national economy. For instance, using data for 21 developing countries, Areskoug (1976) finds that both FDI and government borrowing abroad generated less than a dollar of capital formation per dollar of inflow in a typical LDC. Weisskopf (1972) also arrives at the same conclusion, contending that a given net capital inflow from abroad results in a 23% offset by way of a lower rate of domestic saving in a developing country.

If indeed it is true that FDI has a crowding-in effect in the Arab world, then Arab countries need to take measures to boost the currently very small stock of FDI in the region. As the following section shows, the Arab world has continued to receive the least stock of FDI in the world, despite its robust resource endowments and oil wealth.

Magnitude, Patterns and Distribution of FDI in the Arab World

The past decade or so has witnessed a substantial increase in the stock of FDI around the world.[7] In developing countries alone, the inflow of FDI increased from an average of about $29.1 billion during 1986-1991, to almost $149 billion in 1997 - an increase of over 400% (United Nations, 1998: 361). However, compared to other regions of the world, the Arab world has attracted only a tiny proportion of the global stock of FDI.[8] Table 2 shows FDI flows to West Asian countries during 1980-1995. West Asia accounted for only 0.6% of the stock of FDI in the world during 1980-1985, increasing marginally to 0.8% in 1991-1995. The region's shares of the stock of FDI in developing countries were 1.8% in 1980-1985, 3.8% in 1986-1990 and 2.3% in 1991-1995. Indeed, Africa which has most of the poorest countries in the world, attracted more FDI[9], 2.3% in 1994 and 1.5% in 1995 than West Asia (United Nations, 1997: 95). Since the mid-1980s, the ratio of FDI to GDP in the Middle East and North Africa region has hovered between 0.5% and 0.75% whereas it has been over 1% in Asia, 9% in Malaysia in 1992 and 6%in 1995 (Bisat, 1996: 9).

The current abysmal stock of FDI in the Arab world appears to follow a historical trend. For instance, between 1914 and 1960, a period when developing countries received the largest stock of FDI, the Middle East received the least amount among the regions of the world. In 1914, developing countries accounted for 62.8% of the global stock of FDI, but the Middle East's share of the world stock of FDI was just 2.8% with Africa receiving 6.4%. Of the developing countries' 65.7% share of FDI in 1938, the Middle East's share was 2.6% and Africa 7.4%. In 1960, the developing countries' share was 32.3%, while the Middle East received 2.8% and Africa 5.5% (Dunning, 1981: 224 -235).

Despite the small stock of global FDI in the Arab world, the region appears to be more attractive, compared to other regions of the world, to investors from the Newly Industrializing Countries (NICs), particularly South Korea. For instance, by the end of June 1989, the total stock of Korean FDI in the Middle East was about $144.5 million, which was far more than the $50.2 million of Korean FDI in South and Central America, $49.3 million in Europe and $17.9 million in Africa (World Bank, 1989: 13). The bulk of the Korean FDI in the Middle East is concentrated in the mining, construction and manufacturing sectors. Given the attractiveness of Arab economies to investors from the NICs, and the historically small stock of FDI from the West, Arab countries should focus attention on attracting more investors from the NICs, rather than concentrating on just Western investors.

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[7] The recent growth in FDI around the world has been attributed to the globalization process which, among other things, has encouraged free trade and greater movement of capital. The recent introduction of neo-liberal economic policies and programs in developing countries has also facilitated trade liberalization and investor-friendly economic climates.
[8] Latin America and the Caribbean region rank the highest among developing countries, with 11.2% of the global stock of FDI, followed by South, East, and South-East Asia (excluding China) at 8.8%, and Central and Eastern Europe at 2.6%. The increase in the stock of FDI in Latin America has been attributed to the strong adjustment measures that are believed to have contributed in stabilizing the financial markets, as well as boosting investor confidence in the region (IMF, 1996: 37).
[9] The seven major recipients of FDI in Africa in recent times are Nigeria, Egypt, Tunisia, Algeria, Zimbabwe, Angola and South Africa. The favored sectors have been tourism, food and beverage, textiles and leather, telecommunications, agriculture, mining and quarrying. For details, see United Nations (1999: 45-52).

Table 2. FDI Flows to West Asia, 1980-1995 (Millions of dollars and percentage)

Economy	1980-1985	1986-1990 (Annual average)	1991-1995
West Asia	321.5	1000.2	1641.4
Bahrain	-16.7	66.3	-9.1
Iran	-16.8	-148.2	41.4
Iraq	0.9	3.7	0.5
Jordan	3.5	8.5	14.2
Kuwait	0.5	-1.3	-3.4
Lebanon	0.2	3.9	13.6
Oman	136.2	104.0	123.0
Qatar	1.2	-9.7	36.6
Saudi Arabia	5353.2	604.8	736.6
Syria	18.5	67.4	46.7
UAR	28.4	53.8	112.3
Yemen	20.3	9.1	16.7
Oil economies	133.7	673.4	1037.9
Non-oil economies	187.8	326.8	603.9
West Asia share of: (percent)			
All countries	0.6	0.6	0.8
Developing countries	1.8	3.8	2.3

Source: United Nations, *World Investment Report*, 1996: xvi.

In view of the general notion of the Arab world as a region awashed with petrodollars, the abysmal stock of FDI in the region might, at first blush, seem rather strange and paradoxical. This might be attributed to the following factors: (a) That the region is not particularly attractive to FDI [10]; (b) That existing investors in the region do not reinvest their earnings in the region, in other words, capital outflows are excessive; (c) That foreign investors finance a preponderance of their investments with funds obtained within the region;[11] (d) That Arab countries prefer debt to FDI as a source of development finance; (e) That Arab countries depend on the state as a major financier of investment projects; and (f) A combination of the above factors.

While each of the above explanations seems plausible, some observers have alluded to the non-attractiveness of the region to foreign investment as the major reason for the small stock of FDI. For instance, in the 1999 Index of Economic Freedom compiled by the Heritage Foundation and the Wall Street Journal (November 30, 1999: A26), 12 out of the 19 Arab countries listed in the report were classified as "mostly unfree". The Index classifies countries all over the world into "free", "mostly free", "mostly unfree", and "repressed", on the basis of 50 economic variables in the following categories: banking, capital flows and foreign investment, monetary policy, fiscal burden of government, trade policy, wages and prices, government intervention in the economy, property rights, regulation, and black markets. On account of their poor economic fundamentals and restrictive policies toward FDI, countries classified as either "mostly unfree" or "repressed" are typically regarded as being unattractive to FDI.

The Index lists Bahrain as the country in the region with the highest degree of economic freedom, followed by the United Arab Emirates, Kuwait, Morocco, Oman, Jordan and Saudi Arabia. It is therefore not a coincidence that 43 out of the 50 largest foreign affiliates of multinational

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[10] The non attractiveness of the Arab world to FDI has been attributed to the various restrictive policies on FDI in the region. These include indigenization laws, insufficient tax incentives and lack of local entrepreneurs to collaborate with. Given the restrictive FDI policies in the Arab world, foreign investors appear to favor licensing over equity investment. For a detailed discussion of foreign investment policies in the Arab world, see El Sheikh (1984: 6). The extremely little stock of FDI in Sudan in the 1960s and 1970s is attributable to the October 21, 1964 Revolution, which portrayed the country as a socialist economy. For instance, after the overthrow of the Abboud military regime in 1964, there were socialist slogans calling for the nationalization of foreign trade and property. FDI has also been marginal in the 1980s and 1990s partly because of the blacklisting of Sudan by the US . State Department as a haven for terrorists and Islamic fundamentalists. The country's drawn-out civil war has not helped matters either.

[11] Many Arab countries have had a robust revenue base, either from oil wealth (Saudi Arabia, Kuwait, Iraq, Libya, Bahrain, Qatar, United Arab Emirates) or from bilateral development aid (Jordan and Egypt).

corporations in the industrial and tertiary sectors in West Asia are located in just five Arab countries that are classified as either "free" or "mostly free", i.e. Saudi Arabia, United Arab Emirates, Kuwait, Bahrain and Jordan. In addition, 15 of the largest foreign affiliates in the finance and insurance sectors are also located in these five countries (United Nations, 1996). The countries listed as "mostly unfree" are Tunisia, Qatar, Lebanon, Algeria, Egypt, Yemen, Syria, Iran, Iraq and Libya[12].

A recent report by the United Nations (1999: x-xi) also suggests that the investment climate in some Arab countries may not be palatable to foreign investors. According to the report:

> Most West Asian countries have had severe restrictions on the percentage of equity that foreign investors are permitted to own in local enterprises (in all sectors or, more often, in specified industries or activities). Typically, foreign ownership was restricted to a minority equity stake in most industries. In some key industries, FDI was totally forbidden. The Islamic Republic of Iran and Iraq still severely restrict foreign ownership. The failure of governments (in West Asia) to implement privatization programmes is cited as a main explanation for the modest FDI inflows to West Asia."

Bisat (1996: 15) has recommended the following strategies for improving the investment climate of Arab countries: (a) maintaining stable macroeconomic conditions; (b) accelerating structural reforms; investing effectively in the social sectors; and (c) strengthening the institutional base.

Since reinvested earnings are often a significant component of FDI, the small stock of FDI in the Arab world may also be due to capital outflows. Thus, rather than focusing attention entirely on the attraction of new equity capital, Arab countries may do well by reducing capital outflows from the region. As the previous section indicated, FDI inflow into the Arab world has been low for a very long time, and there really is no reason to believe that FDI inflow will improve significantly in the near future. Indeed, as oil reserves in the Gulf States are depleted rapidly, there would be a decrease in the inflow of oil-based FDI in the region. In addition to luring new FDI into the region, Arab countries should also focus on reducing capital outflows from the Arab world to boost the stock of FDI in the region. However, a precondition for ameliorating capital outflows is firstly, to understand the determinants of capital flows within the Arab region. Such an understanding may be facilitated by a theoretical discussion of the dynamics of capital inflows and outflows.

Determinants of Capital Flows in the Arab World: A Theoretical Discourse

Whether FDI contributes positively to capital formation in the host country depends on the magnitude of inflows and outflows of capital, i.e., on net FDI. Generally, the stock of FDI is expected to be higher in countries in which foreign investors reinvest a large proportion of their earnings than in countries in which capital outflows are excessive. Consequently, the stock of FDI in a country depends on the dynamics of inflows and outflows. Therefore, it is crucial to understand the nature of these dynamics, if one is to offer appropriate policies for boosting FDI in the Arab world.

Capital Inflows. It is quite common in the literature to regard FDI inflows as consisting of the equity capital brought into the host country by the foreign investor. However, there are other indirect ways by which FDI can facilitate capital inflows into the host economy. For instance, the earnings from the export of the investor's goods can be considered an inflow of capital. By producing in the local economy, FDI also helps the host country to conserve scarce foreign exchange that would have been spent on the importation of equivalent goods. The presence of FDI in a developing country may also encourage developed countries and multilateral organizations to offer bilateral and multilateral aid to the host country. Thus, following Lall and Streeten (1977), capital inflow (CI) may be written as:

$$CI = f(X + I + E + A)$$ (Equation 5)

where: X = Export earnings of the foreign investor

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[12] Paradoxically, Tunisia, Algeria and Egypt have been mentioned as some of the largest recipients of FDI in recent times (United Nations, 1999: 45-52). Tables 3-5 also show that Tunisia and Egypt are two of the few Arab countries that experience very moderate capital outflows.

I = Foreign exchange conserved as a result of reduction in imports
E = Equity capital of the foreign investor
A = Bilateral and multilateral aid

Capital Outflows. >From earnings in the host economy, the foreign investor imports capital goods, raw materials and technical/managerial skills. He also remits profit to the parent company of the firm abroad. Hence, the equation for capital outflows (CO) may be written as:

$$CO = f\,(K + R + S + P) \qquad\qquad\qquad\text{(Equation 6)}$$

where: K = Capital goods imports
R = Raw materials imports
S = Imports of technical/managerial skills
P = Repatriation of profits

Net FDI = CI (X + I + E + A) – CO (K + R + S + P), and FDI is said to have contributed positively to capital formation in a given year if $CI_t > CO_t$

A Model Of The Optimum Investment Duration (OID)

Suppose the objective of an Arab country i is to maximize the present value (PV) of net FDI, subject to the condition that its cumulative utility during the life-time of the investment remains at a given level. Assuming that the country's utility in year t is a function of its gross domestic product in the same period:

$$U_I(t) = f_I[\,y_I(t)] \qquad\qquad\qquad\text{(Equation 7)}$$

The country's problem, therefore, will be to:

$$\text{Max.} \sum_{t=1}^{n} \frac{CI - CO}{(1+r)^n}, \text{ subject to } \sum_{t=1}^{n} U_I = \sum_{t=1}^{n} r^t\, f_I[\,y_I(t)\,] = \sum_{t=1}^{n} U_i^o \qquad\text{(Equation 8)}$$

where: r = a discount rate in country i
n = the number of years that the investment is expected to last.
y_i = the gross domestic product of country i.

Assuming a constant discount rate, the present value of net FDI will depend on the magnitude of CI and CO, as well as the number of years by which CI exceeds CO. These may be illustrated graphically by specifying the CI and CO functions. To derive these functions, the following assumptions are made. Consider an open Arab economy with only one foreign investor. Assume that this investor invests in the host country in period t, where t >0. At this initial period, the investor brings in foreign exchange, hires local workers, purchases raw materials and builds its offices. Since most FDIs in developing countries are import-substituting firms, foreign exchange earnings by the investor is negligible.[13]   Assume also that the host country receives only a one-time bilateral and multilateral aid in year t, and that conservation of foreign exchange due to import replacement does not increase over time. Thus, capital inflow decreases in year t+1 as the investor begins to obtain loans and advances from the local financial market (Currie, 1986). Capital inflow also decreases because the investor now finances part of his investment by reinvesting profit into the firm. Capital inflow will continue to decrease over time as the investor becomes more familiar with the local economy and as new investment is increasingly financed by profit. The capital inflow function can therefore be written as:

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[13] Cross-country surveys indicate that a major motivation for FDI in developing countries is the desire to gain access to a large domestic or regional market (Cable and Persaud, 1987: 10). See also El-Naggar (1990: 11)

CI (t) = a + bt, where $\dfrac{dCI\,(t)}{dt} < 0$ (Equation 9)

The magnitude of a (the intercept of the function) depends on the type of sector in which the firm is operating. Investment in a capital-intensive sector implies that the initial capital inflow will be large relative to investment in a labor-intensive, low-technology sector. For simplicity, it may be assumed that the slope of the capital inflow function is constant, i.e. that capital inflow decreases at a constant rate. The capital inflow function may therefore be represented as a negatively sloped curve in Figure 1.

Similar logic may be used to specify the capital outflow function. In period t, the investor repatriates no capital because production has just begun and no profit has been made. Capital outflow in the form of repatriation of profit, dividends, fees, licenses, etc. begins in year t+1. But capital outflow is low initially because the firm is still learning the culture, the local market, and also because the local workers are not yet familiar with the new technology. With an increase in learning, technological mastery and familiarity with the local market comes an increase in profit, as well as an increase in the profit, dividends, fees. etc., repatriated. Thus, capital outflow is an increasing function of time. However, profit repatriation will continue to increase up to a point, and then begins to decrease. The eventual decrease in capital outflow arises from the fact that local enterprises will begin to imitate the foreign investor, which will erode the market share and profit of the firm. The capital outflow function will therefore take the shape of an inverted "U" (see Figure 1), and may be written as:

CO (t) = a* + b*t + c*t^2 (Equation 10)

Where: $\dfrac{dCO\,(t)}{dt} = b* + 2c*t > 0$ and $\dfrac{d^2CO\,(t)}{dt^2} = 2c* < 0$ (Equation 11)

The capital inflow and capital outflow functions intersect at point A, which corresponds with t*. 0t* is referred to as the optimum investment duration, i.e., the duration at which capital inflow exceeds outflow. Other things constant, the larger t* is, the longer the duration at which inflow exceeds outflow, and hence the larger will the present value of net FDI be. It may be noted that at point A in Figure 1, the slope of a tangent to the capital outflow function at point A is exactly equal to the slope of the capital inflow function at the same point. Setting the slopes of the capital inflow and capital outflow functions (Equations 9 and 11 respectively) to each other, it is straightforward to show that:

$$t^* = \frac{b - b^*}{2c^*} \qquad\qquad \text{(Equation 12)}$$

It is necessary, however, to restrict the values of b, b^* and c^*, so that $t^* > 0$. It is known from the shape of the CO function that $c < 0$ and $b^* > 0$. Thus, for $t^* > 0$, $b^*/2c^* > b/2c^*$. For this to happen, c^* must be sufficiently small compared to b^*. This means that a precondition for increasing t^*, and hence the optimum investment duration, is to have a very flat slope of the CO function. It may be pointed out as well that the magnitude of net FDI depends on the vertical distance between the capital inflow and capital outflow functions. To the left of A in Figure 1, CI>CO, and net FDI is positive. To the right of A, CI < CO, and net FDI is negative. What should an Arab economy that finds itself to the right of point A do? Nationalize the foreign firm? Use legislation to forcibly stop the foreign investor from repatriating earnings? Impose a tax on capital outflows, both equity and portfolio? As shall be shown below, one solution may be to manipulate the host country's economic fundamentals in order to reduce capital outflows.

There also is another equilibrium at point B, where CI = CO = 0. This equilibrium implies one of two things: (a) that the investment has become fully indigenized in year t^{**}, since both capital inflows and capital outflows are equal to zero at this point; or (b) that the investment has been liquidated in year t^{**}, i.e. the foreign investor brings in nothing and takes out nothing at this point.

Equation 12 shows that 0t*, the optimum investment duration, depends on the slopes (at two different points of the curve) of the capital outflow function, since the slope of the capital inflow function is assumed to be constant. Thus, a country could influence t* and the vertical distance between the CI and CO functions by shifting the position of the CO function. A downward shift of the CO function increases t* and the vertical distance between the two functions, and hence increases the present value of net FDI (see Figure 2). Conversely, an upward shift of the CO function decreases t*, reduces the vertical distance between the two functions, and thus reduces the present value of net FDI. The challenge for Arab countries therefore, is how to shift the CO function downward. In other words, the challenge is for them to increase the optimum investment duration, as well the vertical distance between the CI and CO functions. What policies may Arab countries use in influencing the shape and location of the CO function? In the words of Helleiner (1987: 70), "what can be done to ensure that any gross inflows of foreign equity or bond finance will not be offset by private speculative outflows?"

Although analysts often talk about the need for an increase in the flow of FDI in developing countries, little is known about the optimal policies for discouraging excessive capital outflows. Yet, it is inconceivable that these countries would attract new flows of FDI on a scale that would fundamentally transform their economies. Thus, an increase in the stock of FDI in developing countries requires both new inflows and concerted efforts to ensure that earnings from existing investors are retained and reinvested in the local economy. Having discussed the theoretical underpinnings of capital flows, the stage is now set for an evaluation of the dynamics of capital outflows from the Arab world.

The Dynamics of Capital Outflows from the Arab World

Before further discussion, a pertinent question must be posed: Is capital outflow a pervasive problem in the Arab world? If so, what is the magnitude and the causes of capital outflows from the region? How might the problem be ameliorated? Table 3 shows the net foreign direct investment flows in selected Arab countries between 1970 and 1983. It may be seen from the Table that with the exception of Egypt, almost all the other countries listed experienced negative net capital flows during this period. Morocco recorded positive net flows, except in 1978 and 1979, while Tunisia's negative net flows turned positive during 1980-83. It is noteworthy however, that the aggregate net capital flows for all the countries
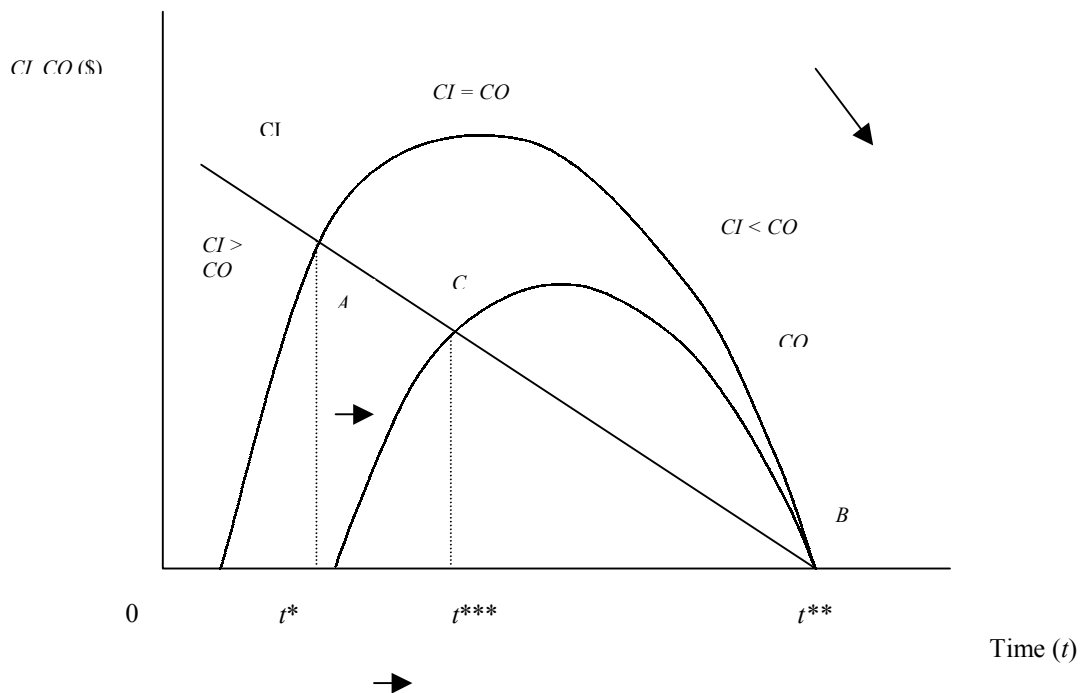
Figure 2: **A Shift in the Capital Outflow Function**

were negative between 1970 and 1983. Indeed, the aggregate negative net capital flows for just the 9 Arab countries listed in the Table amounted to about $49 billion within the period under consideration. This data set suggests that capital outflow was indeed a problem in the Arab world in the 1970s to the early 1980s. Saudi Arabia accounted for the bulk of the negative aggregate net flows, followed by Libya and Algeria.

Table 3. Net Capital Flows* in Selected Arab Countries: 1970-1983
(Millions of dollars)

Country	1970-71	1977	1978	1979	1980	1981	1982	1983
Algeria	-163	-625	-595	-647	-650	-668	-761	-452
Egypt	--	103	300	1209	534	744	649	859
Libya	-428	-627	265	-752	-2436	-2262	-1768	-1789
Mauritania	--	-29	-14	61	5	-7	-26	-42
Morocco	2	15	-12	-19	42	26	56	27
Oman	--	-106	-32	-9	-184	-285	-222	-262
Qatar	--	--	-21	-45	-31	-33	-28	--
Saudi Arabia	-649	-4057	-4458	-1976	-6880	-9565	-6149	-4401
Tunisia	-1	-19	-14	-89	86	137	162	55
Total	-1239	-5345	-4581	-2267	-9514	-11913	-8088	-6005

Source: 1970/71-1979 data computed from Tables A.4 and A.5 of United Nations (1985: 93-96).
The 1980-1983 data set is from *World Development Report* (various years), published by the
World Bank.
N.B. Net Capital Flows: gross inflows of FDI minus gross outflows of profits on FDI.

Was capital outflow a problem in the 1980s? Table 4 shows the net flow of FDI in selected Arab countries between 1980 and 1989. It shows that net FDI flows improved in most Arab countries during this period, although Libya and Kuwait continued to record negative flows. More interestingly, the aggregate

net FDI for all the countries listed in the Table turned positive (except in 1987) during this period. It may then be concluded that compared to the 1970s and early 1980s, capital outflow was not a major problem in the Arab world during the mid 1980s to the late 1980s, albeit a couple of countries continued to experience negative net flows. The improvement in net capital flows in Arab countries continued into the 1990s as Table 5 shows. Specifically, the aggregate net FDI was positive (except in 1995) during 1991-1997. However, Kuwait continued to experience negative flows during much of this period, while Saudi Arabia and Bahrain recorded negative net flows only in a couple of years.

Table 4. Net Direct Foreign Investment in Selected Arab Countries:
1984-1989 (Millions of dollars)

Country	1984	1985	1987	1989
Algeria	-14	-2	-20	-59
Egypt	713	1175	869	1586
Jordan	71	23	33	0
Kuwait	-125	-57	-93	--
Libya	-327	-316	-80	--
Mauritania	1	7	5	3
Morocco	47	20	57	167
Oman	157	125	138	--
Saudi Arabia	5228	2513	-1175	--
Sudan	9	-3	--	0
Tunisia	115	107	92	74
Yemen	7	3	-10	0
Total	5882	3595	-184	1771.

Source: World Bank, *World Development Report*, various years.

On the basis of the data in Tables 3 to 5, Arab countries may be classified into three categories with regard to the severity of capital outflows. The first category consists of countries that maintained positive net flows of FDI during the 1980s and 1990s. This category includes Egypt, Jordan, Morocco, Oman and Tunisia. It should also be noted that Egypt was the only country that did not experience negative net flows of FDI in the 1970s and early 1980s (see Table 3). One may say, therefore, that decapitalization does not seem to be a problem in these countries. The second category is made up of countries in which negative net flows have been quite moderate, occurring only for a couple of years. This includes Mauritania, Yemen, Saudi Arabia and, to some extent, Bahrain. The third category consists of those countries in which negative net flows have either persisted, or in which negative flows have been quite large. Kuwait, Libya and Algeria belong to this category.[14] It is instructive to note that Libya and Algeria also experienced huge capital outflows in the 1970s (see Table 3). The lack of data for other Arab countries has prevented the classification of these countries.

Table 5. Net Capital Flows in Selected Arab Countries: 1991-1997
(Millions of dollars)

Country	1991	1992	1993	1994	1995	1996	1997
Bahrain	1	--	15	-37	-22	53	640
Egypt	191	455	--	1213	505	650	15178
Jordan	-26	44	19	26	75	41	--
Kuwait	187	-1176	-835	-1015	-702	-845	-6648
Lebanon	-4	-3	0	0	25	23	--
Morocco	294	390	468	527	276	380	3635
Oman	134	102	151	55	34	79	2368
Saudi Arabia	358	-84	418	268	-1890	85	38445
Tunisia	122	521	--	426	259	364	4600
Total	1257	252	1236	1463	-1440	830	58218

Source: Computed from *World Investment Report*, United Nations, various years.

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[14] Libya's negative net flows may have been affected by the status of the country as a pariah state, as well as the economic sanctions imposed on the country by developed countries. In the case of Algeria, the sporadic eruption of Islamic fundamentalist sentiments may also be responsible for its negative net flows. The persistent negative net flows in Kuwait are not as easy to explain, except for the very brief period of the Gulf War, which obviously precipitated short-term capital outflows.

How then may the differences in capital outflows in the Arab world be explained? Why would an oil-rich country such as Kuwait be experiencing excessive capital outflows, compared with a resource-poor, aid-dependent country such as Jordan? Are these differences attributable to the differences in the FDI policies of these countries? Are they due to political factors? Can they be explained in terms of the nature of the economic fundamentals of these countries? If so, which economic fundamentals are more significant for explaining the magnitude and persistence of capital outflows? It is obviously impossible to evaluate these issues in a single paper. Consequently, only the effects of economic fundamentals on capital outflows are explored in the following section.

Macroeconomic Fundamentals and Capital Outflows from the Arab World

There is a tendency for analysts to focus exclusively on *new* capital inflows as the only source of FDI stock. Thus, they tend to gloss over the fact that reinvested income from FDI can be a significant source of FDI. For instance, reinvested earnings accounted for about a tenth of total FDI inflows around the globe in 1995 (United Nations, 1997: 3). And as Kogut (1983: 38) rightly points out, "the predominant share of FDI flows are incremental investments in already established subsidiaries". Arab countries could significantly increase their stock of FDI by discouraging excessive capital outflows. The challenge, therefore, is for these countries to design appropriate policies that would significantly lessen capital outflows. However, to do so, one needs to understand the region-specific economic factors that precipitate capital outflows from the Arab world. In fact, understanding and manipulating these economic fundamentals may be more important in attracting and retaining FDI than offering foreign investors a plethora of superfluous incentives.[15]

The economic fundamentals crucial for the retention of FDI in an economy include exchange rates, the rate of growth of real GDP, interest rates, inflation and net foreign assets (El-Naggar, 1990: 3). Currency appreciation makes it difficult for foreign investors in a country to export abroad, as goods in that country become more expensive relative to those of foreign countries. If foreign markets are important for these investors, they will likely relocate to other countries, thus resulting in capital outflows. While exchange rates can affect FDI outflows in various ways, many studies have concluded that a depreciation of the host country's currency can significantly reduce capital outflows. A depreciation reduces the cost of production and investment in the host country relative to the home country of the investor, and thus encourages the investor to reinvest earnings in the host economy. In a study of FDI outflows between Japan and 20 of its major trading partners, Bayoumi and Lipworth (1997: 13) conclude that "the main driving forces for Japanese FDI outflows are domestic investment and the exchange rate". With regard to the exchange rate, they find that in the short run, a 6% depreciation of the host country's currency vis-à-vis the yen (i.e. an appreciation of the yen) results in a 10% increase in capital outflows from Japan. But there is another side to currency appreciation that might encourage capital outflows. The host-country currency depreciation reduces the amount of foreign exchange that a foreign investor can repatriate as profit, fees, royalties, dividends, etc. If the depreciation does not result in a rise in domestic asset prices, currency depreciation may also have the effect of reducing the net wealth of the foreign investor. These two effects might encourage the foreign investor to relocate his operations to another country where the exchange rate enhances the value of repatriated income, as well as the value of his assets. Thus, the effects of the exchange rate on capital outflows are indeterminate *a priori.*

Another economic fundamental that influences FDI outflows is the growth rate of real GDP. Many foreign investors are attracted to developing countries because of their huge domestic markets made possible by large populations. However, large populations *per se* cannot create sizable markets that would attract foreign investors. There needs to be a reasonable level of purchasing power to be an attractive market. Purchasing power depends on the rate of growth of the economy, which in turn determines the level of employment, income and aggregate demand in the economy. Thus, FDI outflows are likely to be substantial in economies experiencing slow economic growth, and are likely to be less in economies with faster economic growth rates.

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[15] There has been an on-going competition between developing countries with regard to attracting FDI. One of the results of this competition is that many unnecessary incentives (in the sense that investment would still occur in their absence) are now being offered to foreign investors. Generally, the incentives offered by LDCs include tariff protection, fiscal incentives (such as tax holidays and other tax concessions, waiver of import duties on raw materials and intermediate inputs), infrastructural incentives and guarantees of repatriation of profits and safety of investment.

Interest rates also influence investors' decision on whether or not to reinvest their earnings in the host country. A high rate of interest would encourage investors to invest their earnings in the local financial and money markets, while a low rate would encourage them to invest abroad, thereby resulting in capital outflows. The rate of inflation also plays a significant role in the decision to reinvest earnings in the host economy. A high rate of inflation is often the result of irresponsible monetary and fiscal policies such as excessive money supply and budget deficits. It may also be reflective of poor economic conditions in the country – conditions that would discourage reinvestment of earnings in the local economy.

Finally, a country's net foreign assets do influence capital outflows from the economy. Investors normally regard large foreign assets as a manifestation of the economic vitality of the host country, and they thus tend to be confident in the host economy. Countries with large net foreign reserves also tend to have robust international reserves which the international financial community interprets as evidence of domestic macroeconomic stability and fiscal discipline. This subsequently encourages reinvestment of earnings in the host country, and reduces capital outflows. A smaller net foreign assets has the opposite effect.

The Model

Capital outflows from the Arab world may therefore be analyzed using the following single-equation model:

$$CO_{it} = \beta_0 + \beta_1 EXCR_{it} + \beta_2 GDPG_{it} + \beta_3 INTR_{it} + \beta_4 INFR_{it} + \beta_5 INFR\text{-}1_{it} + \beta_6 NFRA_{it} + e_t \qquad \text{(Equation 13)}$$

where: CO_{it} = capital outflow from country i in year t measured in millions of U.S. dollars per year.

$EXCR_{it}$ = country i's Rate of Exchange for one US dollar in year t.

$GDPG_{it}$ = the rate of Growth of country i's Real GDP in year t.

$INTR_{it}$ = country i's Rate of Interest in year t measured either by the deposit rate, the money market rate, or the discount rate.

$INFR_{it}$ = the Rate of Inflation in country i in year t proxied by the annual percent rate of change of consumer prices.

$INFR\text{-}1_{it}$ = the lagged value of the Rate of Inflation in country i in year t.

$NFRA_{it}$ = country i's Net Foreign Assets in year t expressed in U.S. dollars.

e_t = a disturbance term.

As mentioned earlier on, the effects of the depreciation of a country's exchange rate on capital outflows from the country are indeterminate *a priori*. Thus, the coefficient on the exchange rate would be either negative ($\beta_1 < 0$) or positive ($\beta_1 > 0$). It is also expected that the coefficient on the rate of growth of the GDP to be negative ($\beta_2 < 0$) because a higher rate of economic growth increases income and aggregate demand. It therefore creates a larger market for foreign investment, which in turn encourages investors to expand their output by reinvesting their earnings in the local economy. The rate of interest should be negatively correlated with capital outflows ($\beta_3 < 0$) because, as alluded to earlier, a high deposit or money market rate encourages the retention of earnings in the local economy. An increase in the rate of inflation, however, is expected to have the opposite effect (i.e. $\beta_4 > 0$), given the fact that high price levels portray a flagging economy that discourages investors from patronizing the host country. Finally, an increase in net foreign assets is expected to be negatively correlated with capital outflows ($\beta_5 < 0$), in view of the fact that it boosts investor confidence in the economy.

Data Sources

To estimate the above model, panel data on both the dependent and independent variables were collected from 1987 to 1997 for the following Arab countries: Bahrain, Egypt, Jordan, Kuwait, Lebanon, Morocco, Oman, Saudi Arabia, Tunisia and United Arab Emirates. Other Arab countries have been excluded because of the lack of a complete data set on the variables in Equation 13. The period 1987-1997 has also been selected because this is the only period for which complete data set was available for the selected countries. Data on capital outflows were collected from various issues of the *World Investment Report* published by the United Nations Conference on Trade and Development, Division of Transnational

Corporations and Investment. Data on exchange rates, interest rates and net foreign assets for the sample countries were from *International Financial Statistics* (various issues) published by the International Monetary Fund. Data on the growth rate of real GDP and the rate of inflation were collected from various issues of the IMF's *World Economic Outlook.*

Analysis Of Results

Equation 13 is estimated using the **Seemingly Unrelated Regression** method, and the results are reported in Table 6. It may be seen from Table 6 that all the independent variables are significantly different from zero, with an adjusted R^2 value of 0.65. Because of country fixed effects, there is no common intercept (or constant term) in the estimated model. This suggests that the effects of macroeconomic fundamentals on capital outflows vary widely among Arab countries. The different constant terms show that Kuwait (646.88) is more prone to capital outflows, followed by Lebanon (130.97), Egypt (60.45) and Saudi Arabia (33.32). The countries that are the least susceptible to capital outflows are Jordan (-6.15), Bahrain (0.24), Oman (2.39) and United Arab Emirates (5.87). It is interesting to note that Kuwait's susceptibility to capital outflows is also supported by results shown on Tables 4 and 5. Table 7 shows as well that Kuwait has the largest capital outflow/GDP ratio compared to other Arab countries. The lower susceptibility of Jordan, Bahrain and Oman to capital outflows is also manifested in the aforementioned Tables. Jordan's low susceptibility to capital outflows may be attributed to the fact that the Jordanian economy is characterized by a much more favorable capital-output ratio, a fairly large privately owned capital stock, and a stable macroeconomic environment (Bisat, 1996: 15). These are qualities that are lacking in Kuwait.

Table 6. Results of Estimation of Equation 13, with Capital Outflow (CO) as Dependent Variable

Variable	Coefficient	Std. Error	t-Statistic	Prob.
ECXR	–0.079441	0.008334	-9.531644	0.0000
GDPG	4.169778	0.115456	36.11571	0.0000
INTR.	–3.910906	0.322206	-12.13790	0.0000
INFR.	–0.166146	0.046995	-3.535390	0.0007
INFR (-1)	0.328099	0.031952	10.26838	0.0000
NFRA	0 .000869	0.000242	3.585157	0.0006
R-squared	0.704203	Adjusted R-squared 0.650746		

Fixed Effects:
Bahrain (0.24), Egypt (60.45), Jordan (-6.16), Kuwait (646.88), Lebanon (130.97), Morocco (16.48), Oman (2.39), Saudi Arabia (33.32), Tunisia (19.82), UAE (5.87).

Of the six independent variables, however, only the EXCR, the INTR and the $INFR_{-1}$ appear with the expected signs. These results suggest that a one-unit increase in the rate at which the currency of an Arab country is exchanged for US$1 decreases capital outflows from that country by about $0.08 million. Thus, although exchange rates do affect FDI outflows from the Arab world, these effects are very small. The marginal effects of exchange rates on FDI outflows in Arab countries may be attributed to the fact that a good number of the foreign affiliates of multinationals in the region are in the oil industry. Production costs which are usually influenced by exchange rate volatility, are not a major reason for foreign investment in the Arab world. In other words, exchange rate fluctuations do not significantly influence their decision to divest from the region.

Of the independent variables in Equation 13, the INTR has the largest impact on capital outflows from the Arab world. For instance, Table 6 indicates that a one-percent increase in the INTR in an Arab country reduces capital outflows by about $4 million, while a one-percent rise in the INTF in the previous year increases capital outflows in the current year by about $0.3 million. The GDPG and the NFRA appear with the unexpected signs, suggesting that contrary to expectations, economic growth in Arab countries and the accumulation foreign assets by these countries, actually result in an increase in capital outflows. That economic growth does not reduce capital outflows from the Arab world may be explained by the fact that much of the FDI in these countries may have been attracted by the resource endowments, rather than the market size of the region. Thus, an increase in the market size caused by faster economic growth, may not

significantly affect capital outflows. Even though the coefficient on NFRA appear with the wrong sign, the quantitative effect of this variable on capital outflows is highly negligible.

Capital Outflows and Economic Development in the Arab World

As indicated earlier, most Arab countries have experienced some degree of capital outflows at various times.   While these outflows seem to be moderate, in absolute terms in a number of countries, they have tended to be quite severe and persistent. A more pertinent question is whether the degrees of capital outflows observed among Arab countries are in any way, inimical to the region's economic development.

Capital outflow may be regarded as potentially capable of "pulling" back a country's rate of economic growth. This is so because it depletes a country's domestic capital, raises the rate of interest and hence decreases private fixed capital formation. In the short to medium term, this process decelerates a country's rate of economic growth. Therefore, the question is whether the "pull effects" of FDI outflows in Arab countries are substantial or negligible. Although there are various ways of ascertaining the "pull effects" of FDI outflows, one simple approach is to evaluate the ratio of capital outflows from a given country in a given year to its GDP in the same year.

Table 7 shows such a ratio for 10 Arab countries between 1987 and 1997. It shows that with the exception of Kuwait, the ratio of FDI outflows to GDP for these Arab countries has been consistently very small, less than 0.5% for most countries and indeed negative for a number of countries. But this ratio may increase in the future if FDI outflows rise, or if the GDP of Arab countries fall, or both. A rapid depletion of oil reserves in the Gulf States or a continuous fall in oil prices (which would reduce GDP) may eventually increase the ratio of capital outflows to GDP. In the meantime, one may conclude that with the exception of Kuwait, the present magnitude of FDI outflows from Arab countries does not seem to be damaging to the region's economic growth. The story is different however, for Kuwait. The ratio of capital outflows to GDP in this country has tended to be far higher that those of other countries, i.e. 6% in 1992, about 3% between 1992 and 1995, and between 1 to 2.9% during 1988-1991. While a reduction in capital outflows may not have a significant effect on the growth of many Arab countries, it may have some effect on the growth of Kuwait. In other words, Kuwait stands to benefit more from a reduction of capital outflows than other Arab countries.

That capital outflows do not have significant effects on the growth of Arab countries should not come as a surprise. Firstly, given the small proportion of FDI in the gross fixed capital formation of Arab countries, it should not be surprising that FDI outflows have no negative impact on the growth of Arab economies. Public sector investment has continued to account for a large proportion of fixed capital formation in the region, representing almost half of the total investments in Arab countries. As a percentage of the GDP, public-sector investments in the Arab world are among the highest in the world: 16% in 1982 and 10% since the early 1990s, compared with 6% in other developing countries and 7 to 8% in Asia, most of which were made in basic social services and the development of human capital (Bisat, 1996: 9).

**Table 7. Foreign Direct Investment Outflows as a Percentage of GDP
in Selected Arab Countries, 1987-1997**

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Bahrain	--	0.23	0.32	-0.47	-0.04	0.05	-0.42	-0.14	-0.10	-0.39	0.02
Egypt	0.04	0.04	0.07	0.03	0.19	0.01	0.06	0.07	0.20	0.01	0.04
Jordan	0.03	0.03	0.42	-0.81	0.34	-0.06	-0.97	0.24	-0.44	-0.67	0.15
Kuwait	- -	1.08	2.87	1.01	2.37	6.00	3.40	3.02	3.02	-4.15	0.92
Lebanon	--	0.40	-0.10	-0.36	-0.30	-0.13	-0.10	-0.09	-0.03	-0.02	-0.03
Morocco	0.02	0.02	0.02	0.02	0.11	0.11	0.03	0.03	0.03	--	0.08
Oman	-0.01	-0.01	-0.01	-0.01	-0.02	-0.01	-0.01	-0.01	0.01	0.01	0.03
S/Arabia	0.35	0.33	0.74	-0.61	-0.20	0.03	-0.08	-0.08	0.01	0.14	0.09
Tunisia	-0.01	-0.01	0.05	-0.01	0.02	0.03	0.01	0.02	-0.03	--	0.02
UAE	--	0.04	0.01	-0.04	0	0.07	0.02	0.03	0	-0.03	-0.03

Sources: Computed on the basis of data from: *The World Economic Factbook* (1996); *World Development Report* (1999); *World Investment Report* (various years), and *World Tables* (1994).

Secondly, Arab governments play significant roles in Arab economies. This is especially true of the Gulf states, which Abdel-Fadil (1987) describes as "rentier states" or "rentier economies". One feature of rentier economies is that the state uses external rents from oil to support public and private enterprises. Abdulla (1999), for instance, has shown how the Gulf states participate effectively in the economy by creating and strengthening the private sector, subsidizing local industry through the provision of cheap loans, inputs, electricity, water, preferential treatment in government procurement and assistance in marketing research.

In the specific case of Kuwait, Marzouk (1990: 353) observes that much of the oil revenues in that country has "enabled the Kuwaiti government to undertake economic policies aimed at creating a 'model' welfare state. These policies have led to the development of an economic and social infrastructure that is conducive to domestic development efforts aimed at greater economic diversification and reduced reliance on the external sector". Thus, government revenues and expenditures (rather than FDI inflows and outflows) in rentier economies seem to be more decisive in the performance of these economies.

Some analysts are however, skeptical about the effectiveness of government expenditures in facilitating growth and development. In a study of the impact of government expenditures on growth in developing countries, Landau (1986: 61) concludes that "on net, government capital expenditure is at best no help to growth and perhaps it is slightly harmful". In the case of Arab countries, it has been suggested that the high incremental capital-output ratio, i.e. the amount of investment needed to produce one unit of output in the region, is attributable to the huge public-sector investment, which has tended to encourage low efficiency of capital (Bisat, 1996: 15). Thus, the present growth path of Arab countries, while not in danger of being harmed by capital outflows, does not seem to be sustainable in the long-term. For instance, the inevitable depletion of oil reserves in the long-term would deprive the Gulf States of oil rent supportive to investment in infrastructure, basic social services and industrial projects.

Conclusion

This paper has shown that Arab countries have persistently received the least stock of FDI compared to other regions of the world. Given that this abysmal stock of FDI has tended to follow a historical trend, the paper argues that Arab countries should focus attention on how to discourage capital outflows, rather than paying exclusive attention on new equity investment. However, discouraging excessive capital outflows from the region requires knowledge of the macroeconomic fundamentals that determine capital outflows from the region. The paper argues that identifying and manipulating these macroeconomic variables may in fact be more important to the retention of FDI in the region than offering a plethora of superfluous incentives. Using panel data from 10 Arab countries, the paper concludes that macroeconomic variables such as the exchange rate, the rate of growth of real GDP, interest rate, the rate of inflation in the current and the previous year, and net foreign assets, do have some effects on capital outflows from the region.

Of the aforementioned variables however, three were found to be particularly important with regard to reducing capital outflows from the Arab world. Specifically, an increase in the exchange rate, i.e. depreciation of the local currency, and a rise in the rate of interest (deposit or money market rates) are found to be negatively correlated with capital outflows. Thus, Arab countries may reduce capital outflows from the region by avoiding the overvaluation of their currencies, as well as the repression of their financial markets. The latter has the potential effect of generating negative real rates of interest in a given Arab country. It has also been shown that an increase in the rate of inflation in the previous year leads to an increase in capital outflows in the current year. This suggests that Arab countries should avoid inflationary monetary and fiscal policies in order to reduce capital outflows.

One result from the paper that might surprise some observers is that capital outflows do not seem to have negative effects on the economic growth of the Arab world. There are two major reasons for this result. Firstly, the share of FDI in fixed capital formation in Arab countries is very small, i.e. less than 5% for most countries. Secondly, many Arab countries are rentier economies, in the sense that the state uses oil rent to promote and support private entrepreneurship, infrastructure development, as well as investment

in human resources. Thus, government expenditure, rather than FDI flows, seems to be more decisive in the growth process. This is not to suggest however, that Arab countries should adopt a lukewarm attitude toward FDI flows. Given the inevitable depletion of their oil reserves, they should focus attention on how to manipulate their macroeconomic fundamentals in ways that discourage excessive capital outflows.

References

Abdul-Fadil, M. 1987. The macro-behavior of oil-rentier states in the Arab Region. In *The Rentier States.* Edited by H. Beblawi and G. Luniani. London: Croom Helm.

Abdulla, K.M. 1999. The state in oil rentier economies: The case of Bahrain. In *Change and Development in the Gulf.* Edited by A. Abdelkarim. London: Macmillan.

Areskoug, K. 1976. Foreign direct investment and capital formation in developing countries. *Economic Development and Cultural Change* **24**, April: 539-547.

Bayoumi, T. and G. Lipworth. 1997. Japanese foreign direct investment and regional trade. *Finance and Development* September: 11-15.

Bisat, A. 1996. Investment and growth. In *Building on Progress – Reform and Growth in the Middle East and North Africa.* International Monetary Fund, Washington, DC

Borensztein, E., J.D. Gregorio J.W. and Lee. 1995. How does foreign direct investment affect economic growth. NBER Working Paper Series N0. 5057, National Bureau of Economic Research, Cambridge MA.

Caves, R.E. 1982. *Multinational Enterprise and Economic Analysis.* Cambridge: Cambridge University Press.

Chenery, H.B. and A. Strout. 1966. Foreign assistance and economic development. *American Economic Review*, September: 15-27.

Currie, J. 1986. Introduction. In *Papers and Proceedings of a Seminar on Foreign Investment in Africa.* Edited by J. Currie. London: Commonwealth Secretariat.

Dunning, J.H. 1981. *International Production and the Multinational Enterprise.* London: George Allen & Unwin.

El-Naggar, S. 1990. Investment policies in the Arab Countries: The basic issues. In *Investment Policies in the Arab Countries.* Edited by S. El-Naggar. International Monetary Fund, Washington, DC: 1-18.

El-Sheik, F.R.A. 1984. *The Legal Regime of Foreign Private Investment in the Sudan and Saudi Arabia.* Cambridge: Cambridge University Press.

Euromonitor. 1996. *The World Economic Factbook 1996/1997.* London: Euromonitor Plc.

IMF. 1996*. World Economic Outlook.* Washington, DC.

_____. Various years. *International Financial Statistics.* Washington, DC.

Index of Economic Freedom. 1999. Washington, D.C. and New York: The Heritage Foundation and the Wall Street Journal.

Kogut, B. 1983. Foreign direct investment as a sequential process. In *The Multinational Corporation in the 1980s.* edited by C.P. Kindleberger and A.B. Audretsch. Cambridge MA: The MIT Press:38-56.

Lall, S. and P. Streeten. 1977. *Foreign Investment, Transnationals and Developing Countries.* London: Macmillan.

Landau, D. 1986. Government and economic growth in the less developed countries: An empirical study for 1960-1980. *Economic Development and Cultural Change* Volume 35, No.1, Oct: 35-75.

Marzouk, M.S. Economic diversification and food self-sufficiency in an oil-based economy: The economics of establishing an SCP industry in Kuwait. *Journal of Developing Areas,* April 1990:351-366.

Rahnema, S. 1990. Multinationals and Iranian industry: 1957-1979. *The Journal of Developing Areas* **24**: 293-310.

Rosenstein-Rodan, P.N. 1961. International aid for underdeveloped countries. *Review of Economics and Statistics* **43**: 107-38.

Todaro, M.P. 1997. *Economic Development.* (Sixth Edition), New York: Addison-Wesley.

United Nations. 1997. *Survey of Economic and Social Developments in the ESCWA Region, 1996-1997.* New York.

_____. 1985. *Trends and Issues in Foreign Direct Investment and Related Flows.* New York.

_____. 1997 and 1999. *World Investment Report.* New York and Geneva.

_____. 1996. *World Investment Report.* New York and Geneva.
_____. 1998. *World Investment Report.* New York and Geneva.

Wall Street Journal. 1999. New York: Dow Jones & Company,

World Bank. 1989. *Foreign Direct Investment from the Newly Industrialized Economies.* The World Bank Industry and Energy Department, Washington, DC.

_____. Various years. *World Development Report.* Washington, DC.

_____. 1994. *World Tables.* Baltimore and London: The Johns Hopkins University Press.