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The Economic and Political Determinants of IMF and World Bank Lending in the Middle East and North Africa

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Summary. — This paper assesses the economic and political determinants of IMF and World Bank program loans to the Middle East and North Africa. First we assess what is already known about the geo-political influences on aid flows to the Middle East and North Africa (MENA) region and the potential for this to operate via the IMF and World Bank. From this we conclude that there is scope for IMF and World Bank lending in the region to respond to the political interests of their major shareholders, particularly the United States. We support these arguments with both a qualitative and a quantitative analysis of the determinants of World Bank and IMF program lending to the region, focusing on both economic need in the MENA countries and the politics of donor interest before concluding.

Key words — IMF, World Bank, Middle East and North Africa, aid allocation

1. INTRODUCTION

The Middle East and North Africa (MENA) consists of the predominately Islamic cultures of the Gulf Arab countries, the Levant, the countries of North Africa, plus Iran, and the more industrialized country of Israel. [1] MENA assumes both political and economic significance. Politically, it is arguably the epicenter of world crisis, chronically war-prone, and the site of the worlds most protracted conflicts (Hinnebusch, 2003, p. 1); economically, it owns the bulk of the world's oil reserves, driving in particular the USA economic engine. In light of the region's geo-politically and economically strategic position in the world economy, it is clear that economic and political factors are inextricably linked when it comes to the manner in which the West, particularly the United States, responds to the region's needs.

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There is a long and rich theoretical and empirical literature on the determinants of the geographical allocation of foreign aid. [2] It is generally accepted that this allocation is influenced by both recipient need and donor interest and that multilateral aid is less susceptible to donor interest than bilateral aid (Maizels & Nissanke, 1984; Rodrik, 1995). In the past donor interest has often reflected the geopolitics of the Cold War, with pro-western regimes, regardless of economic need and their record on human rights, being large recipients of western aid. [3]

Even before the collapse of Communism in the late 1980s and early 1990s, a new theory was emerging to the effect that "Islam [is] the new Communism and [hence represents] a grave threat to Western civilization" (Niva, 1998, p. 27). Consequently, "rogue states" were isolated while pro-western regimes, particularly if they were threatened by Islamists, were rewarded for serving Western interests (Hubbell, 1998, p. 9). Hence, the end of the Cold War replaced the old dichotomy in the Arab World between conservative pro-Western and socialist pro-Communist Arab regimes with a new and less covert formula based on "friends or allies, or good or bad" regimes (Perthes, 1998, p. 30).

It is possible that past aid allocations to MENA have been influenced by United States interests in the region, and that the IMF and World Bank are not immune from such influences. It is often argued, particularly by the anti-globalization movement, that the two Washington-based multilaterals are strongly influenced by the economic and political needs of their major western shareholders, especially the United States. This influence can take two forms—determining the geographical flow of funds, that is, who gets what from the IMF and the World Bank; and influencing the conditionality attached to such funds, that is, program loan recipients are expected to undertake economic liberalization programs, which help to open up their economies to the global economy and Western economic penetration. In addition, we can speculate that if there is evidence that past financial flows into pro-western MENA countries have responded to donor interest rather than recipient need, then, given the post 9/11 foreign policy concerns of the west, this may well intensify in the future. [4]

In light of the above, this paper attempts to assess whether donor interest, particularly the political interests of the United States, have affected the flow of funds from the IMF and World Bank to the MENA region. Although there is a large body of literature on the multiple determinants of aid allocation, much of the empirical work does not disaggregate aid by donors and when it does it tends to focus on bilateral donors. In addition, the more recent empirical work tends to employ panel data which aggregates recipients. Although there is a small but growing literature on the influence of the political preferences of the IMF and World Bank's principal shareholders on lending decisions (Barro & Lee, 2001; Bird & Rowlands, 2001; Fleck & Kilby, 2001; Killick, 1995; Rowlands, 1995; Thacker, 1999) to the best of our knowledge, this is the first paper which attempts to specifically analysis this phenomenon in the geopolitically strategic MENA region. In addition, the fact that we concentrate on specific MENA countries enables us to capture political influence in a manner somewhat different from the existing studies which tend to look at IMF lending in aggregate. Such an analysis is timely given the new foreign policy interest of Western powers in MENA.

The remainder of this paper is divided up as follows. In the next section, we assess what is already known about the geo-political influences on aid flows to the MENA region and the potential for this to operate via the IMF and World Bank. From this we conclude that there is scope for IMF and World Bank lending in the region to respond to the political interests of their major shareholders. We support these arguments with both a qualitative and a quantitative analysis of the determinants of World Bank and IMF program lending to the region, focusing on both economic need in the MENA countries and the politics of donor interest before concluding.

2. POLITICS, AID, AND MENA—WHAT DO WE ALREADY KNOW?

Three facts are already established in the literature—bilateral aid flows are influenced by donor political interest; flows into MENA, most notably Egypt and Israel, are partly politically determined; and the United States wields considerable power and influence in the IMF and World Bank.

(a) *Trends in aid flows to MENA*

The MENA region has been the second largest regional recipient of aid in the period since

1960. From 1960 to 2001, the MENA region received nearly $329 billion of aid (in 2000 prices), which only its poor neighbor sub-Saharan Africa exceeded by a large margin. [5] In terms of the importance of different donors to the region, the United States championed MENA in the 1960s, 1980s, and 1990s, while the GCC was the largest donor in the 1970s (see Figure 1). The multilateral donors have been less important to the region than the bilateral donors and although the World Bank is the largest multilateral donor its role pales into insignificance compared to that of the United States, as shown in Table 1. The same is true of the IMF (Appendices A and B provide details of all IMF and World Bank program loans to MENA countries).

(b) *Donor interest as a determinant of aid flows to MENA*

Donor interest seems to play a significant role in aid allocation to MENA. Many aid allocation studies based on models which incorporate variables representing both donor interest [6] and/or recipient need have reached the conclusion that donor interest is an important determinant of the geographic allocation of aid, especially on the part of bilateral donors (Berthélmy & Tichit, 2002; Feeny & McGillivray, 2002; Frank, 1969; Hayter, 1971, 1981; Hensman, 1971; Jalée, 1968; Maizels & Nissanke, 1984; McGillvray, 2003; McKinlay & Little, 1977, 1978, 1979). Our own recent study, based on a mathematical model of the aid allocation process and employing a fixed effects model with panel data produced a similar result (Harrigan & Wang, 2004). [7]

A number of the aid allocation studies introduce dummies to reflect specific strategic links between donors and certain recipients. This is most common in the context of MENA, where dummies are often introduced for Egypt and Israel when the database includes these two countries. Most of these studies find these dummies to be positive and significant, for example, Alesina and Dollar (2002), Berthélmy and Tichit (2002), Feeny and McGillivray (2002) among many others. [8] The Egypt and Israel dummies reflect that fact that these two countries are key strategic allies to the West, especially the United States, such that donor interest is likely to have a positive influence on aid allocations. According to Feeny and McGillivray (2002,

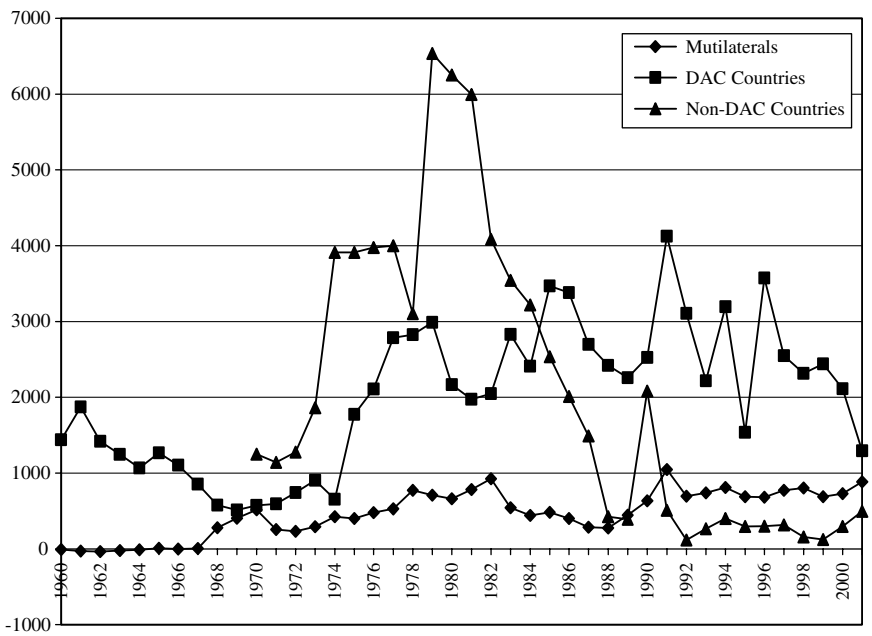

Figure 1. *The source of net ODA disbursement (US$ million-2000 price). Data source: DAC on-line database. Note: Non-DAC is taken as proxy for GCC aid.*

Table 1. *US aid and World Bank aid to MENA (US$ million)*

	United States	US share (%)	WB	WB share (%)	Total
Africa—North of Sahara					
60–69	9995.95	39	−49.3		25,610
70–79	7545.67	16	1051.4	2	48,466
80–89	16303.53	42	1191.7	3	39,084
90–99	13785.49	34	308.2	1	41,105
2000	629.13	29	22.8	1	2,184
2001	586.09	24	−1.0		2,403
Middle East					
60–69	5056.72	42	−76.4		11,969
70–79	11554.3	22	582.0	1	51,540
80–89	19787.32	33	691.3	1	60,860
90–99	17554.76	44	606.7	2	39,739
2000	1216.42	39	47.3	2	3,141
2001	500.46	19	57.9	2	2,674

Data source: DAC online database.

p. 14) "Israel's relationship with the United States is arguably one of the most intense between a donor and a recipient."

Our own work (Harrigan & Wang, 2004) has enabled us to go beyond simple dummies for Egypt and Israel and to make more country-specific observations regarding the influence of donor interest in aid allocations to MENA countries. In our base regression, we have applied a fixed effects model to panel data to analyze the determinants of aid allocations by various classes of donor (with 2,484 observations covering 32 years and 138 recipients). The donor–recipient fixed effect coefficients for MENA countries are reported in Table 2. These coefficients capture donor–recipient specific effects, that is, they show the linkages between donor and specific recipients, which include long-term strategic relations, economic linkages, colonial ties, etc. As can be seen from Table 2, donor interest, as represented by the fixed effects coefficient, has a strong positive effect in the allocation of US aid to Israel and Jordan, two of the most strategically important US allies in the region, and a strong negative effect on US aid allocation to Iran, Sudan, and Yemen, countries traditionally hostile to US foreign policy in the region. [9] As expected, the fixed effects coefficients for multilateral aid are much smaller, although links between multilateral aid and Egypt, as well as Jordan and Lebanon, are evident. Interestingly, Israel is not favored by the multilaterals, in contrast to its special relationship with the United States.

Another recent study of aid allocation, which enables conclusions specific to some of the MENA countries is that of Collier and Dollar (2002). In their paper, they compare the actual

Table 2. *Donor–recipients fixed effects coefficients for MENA countries*

Country	United States	Non-United States[a]	Multilateral
Egypt	0.87	1.56	0.72
Iran	−1.61	−0.21	−0.83
Israel	6.03	1.4	−1.22
Jordan	2.41	0.85	0.67
Lebanon	0.91	0	0.72
Morocco	0.35	1.23	0.25
Sudan	−1.9	−0.24	0.18
Syria	−0.34	−1.45	−0.49
Tunisia	0.65	1.34	0.39
Turkey	−0.6	1.46	0.15
Yemen	−2.24	−0.55	−0.23

Source: Harrigan and Wang (2004).
[a] Non-United States is aid from all OECD DAC members excluding United States.

Table 3. *Optimal versus actual 1996 aid allocation in selected MENA countries (per cent of GDP)*

Country	Poverty-efficient allocation	Actual aid
Jordan	0.0	3.26
Egypt	0.0	1.31
Morocco	0.0	0.70
Tunisia	0.0	0.29
Algeria	0.0	0.22

Source: Collier and Dollar (2002, Table 3).

allocation of aid with an optimal poverty-efficient allocation of aid, with the latter assumed to depend on each recipient's level of poverty, the elasticity of poverty with respect to income, and the quality of its policies. Comparing actual 1996 aid allocations with the optimum they find that a large number of middle-income countries with poor policy receive excessive amounts of aid. As shown in Table 3, the significance of their results in the context of MENA is that all of the MENA countries in their sample of 59 developing countries should not receive any aid on the poverty-efficient criteria. Jordan in particular stands out as a country receiving aid equivalent to 3.26% of its GDP as opposed to 0% under the optimal Collier and Dollar allocation.

The above types of studies have led to the general conclusion that MENA is over-aided. In the words of DFID:

> "In comparison with other regions, it (MENA) receives substantially more aid per poor person ... but poverty reduction is not the primary motivation for many donors' assistance to MENA...aid allocations are substantially influenced by donors' domestic political considerations, including commercial advantage and foreign policy objectives such as migration and terrorism." (DFID, 2003, p. 11)

(c) *Donor interest and the IMF and World Bank*

Although there seems to be ample evidence that bilateral aid flows to the MENA region are influenced by donor interest, a common view is that flows from multilaterals such as the IMF and World Bank are less likely to be influenced in this way since they do not represent the interests of any particular country. Indeed, the Bank and Fund Articles of Agreement explicitly state that lending decisions should not be influenced by political factors. [10] However, in reality, it seems that this has only reduced the level of politicization in their actions rather than removed it altogether. Therefore, it is possible that IMF and World Bank lending provide donors with another arms length instrument to pursue their own interests. This might include the disbursement or withholding of IMF and World Bank funds to reward or punish recipient behavior according to the interests of the major shareholders of these two institutions.

Analysis of the voting power of the United States in the IMF and World Bank clearly shows that the United States has the capacity to exercise leverage in these two institutions. Indeed, a common criticism of the operation of IMF and World Bank is that their decision making process is dominated by the G-8 countries, especially the United States. The Bretton Woods institutions have systems of governance based on weighted voting. Each member possesses a number of votes, which depend on its quota allocation and which must be cast as a bloc. This leads to a problem of democratic legitimacy since a member's influence or voting power within such a decision-making system does not in general correspond to its voting weight.

Using voting power analysis, [11] Leech and Leech (2003) and Leech (2002) show that the United States possesses considerably more power than voting weight in relation to ordinary decisions requiring a simple majority. They conclude "Weighted voting tends to further enhance the power of the United States at the expense of all other members in both the board of Governors and the Executive board" (Leech & Leech, 2003, Abstract) and "Our principal result is that the voting power of the United States turns out to be far greater than its quota would warrant" (Leech & Leech, 2003, p. 3).

Given America's voting power advantage in the IMF and World Bank, Mckeown, Pallansch, and Thacker (1999) have argued that there is no reason why American policy makers would not be expected to use this power in order to promote adherence to US alliances; to secure the strengthening of a regime friendly to the United States or to weaken a hostile regime by removing a source of support; and to

win trade or investment concessions. Conteh-Morgan (1990) and Zimmerman (1993) have made a similar argument. The influence of the US government is further evidenced by the fact that the American Executive Director "is ordered by law to clear his or her decision with the Secretary of the Treasury' (Swedberg, 1986, p. 379) and each major decision must have the approval of the US Senate and Congress (Smith, 1984).

A number of empirical studies have attempted to provide more rigor to the above analysis by trying to identify and quantify the specific determinants of IMF lending, [12] Joyce (1992), Conway (1994), and Knight and Santaella (1997) concentrated on economic determinants. Some consensus has emerged with respect to key economic variables. Declines in export earnings, high debt service ratios, and the presence of arrears on debts, as well as histories of other financial problems are all associated with a higher likelihood of an IMF agreement being signed.

Based on a simple macroeconomic model, Thacker (1999) conducted a test on whether IMF lending is politicized by introducing variables of political proximity (UN voting pattern similarity between United States and recipient) and political movement (the shift of recipient's voting pattern toward USA voting pattern). His results show that movement toward the United States within a defined international political space can significantly increase a country's chances of receiving a loan from the IMF. The results from similar studies (e.g., Barro & Lee, 2001; Bird & Rowlands, 2001; Rowlands, 1995) are generally consistent with Thacker's findings, but divergent regarding the level of USA influence. [13] For example, Rowlands (1995) concludes that the evidence for systematic US influence is less strong than that commonly expected.

IMF lending may also be influenced by political conditions in recipient countries, such as democratization or elections. Dreher and Vaubel (2002) conduct a formal test of the political business cycles using regression analysis. They found that IMF credits in the more democratic recipient countries are larger in pre-election and post-election years, while the credits in more authoritarian regimes are marginally smaller in post-election years.

It is not just the receipt of a loan that may be influenced by western countries; the terms of the loan might also be affected. A series of case studies conducted for a project by Killick (1995, pp. 118–119) reveals that at least one-third of 17 countries studied secured favorable loan terms on their IMF programs due to the intervention of major shareholding countries on their behalf. [14] Oatley and Yackee (2000) took the size of IMF loans as the dependent variable and found that lending decisions were responsive to US pressure, with larger loans going to countries in which American banks were highly exposed and to governments closely allied to the United States.

Regarding World Bank lending, Fleck and Kilby (2001) used panel data to examine the geographic distribution of the World Bank lending from 1968 to 1992 and conclude that "Countries with strong US trade ties received a significant share of the World Bank lending than comparable countries with weak ties; Countries which the United States favored with bilateral aid received a disproportionate share of the World Bank funds as well" and such effects "vary across US presidential administrations" (Fleck & Kilby, 2001, p. 16). In a more qualitative analysis of the World Bank, Schoultz (1982) has documented that the World Bank's "interests" in a given loan or aid package are often influenced by the US Executive and Congress.

The above literature review has indicted that donor influence, including strategic geo-political interests, influence aid allocations, especially allocations in the MENA region, and that the IMF and World Bank are not immune from the influences of their major shareholders, particularly the United States. We now turn to look more specifically at the determinants of IMF and World Bank program lending in MENA in order to assess to what extent it has been determined by recipient need and to what extent by donor interests. We adopt two approaches—a qualitative analysis of the timing of the Bank and Fund loans and a more formal quantitative analysis of IMF lending based upon a Probit model.

3. THE TIMING OF IMF AND WORLD BANK PROGRAMES IN KEY MENA RECIPIENTS: A QUALITATIVE ANALYSIS

(a) *Recipient economic need*

Although IMF and World Bank program loans have only been a small percentage of total aid flows into the MENA region, they neverthe-

less have the capacity to influence the recipient economies via the loan conditionality. In the past, such conditionality has brought with it economic reform via structural adjustment and stabilization programs. A cursory glance at economic performance in the region makes it clear that reform was indeed needed in many MENA countries in the post-1980 period.

In order to fully understand economic performance in the region and the need for both financial support and economic reform from the mid-1980s onwards (and hence a role for the IMF and World Bank) it is necessary to divide performance into sub-periods. During the 1973–81 period, the region's wealth and industrial structure was concentrated on oil. During this period, the region as a whole also enjoyed substantial inflows of so called Official Development Assistance (ODA) from DAC bilateral donors, non-DAC bilateral donors, and multilateral donors. As shown in Table 4, the 1970s was a golden period for the MENA region. GDP growth averaged over 6% per annum, gross domestic savings and capital formation were a respectable 37% and 29% of GDP, respectively, and both export and import coefficients were high. On the back of this wealth, public expenditure expanded with a strengthening of both state welfarism and state economic activity.

However, when oil prices softened in the 1980s, the structural weaknesses of the economies in the region, especially the over-reliance on oil, became apparent. [15] As can be seen from Table 4, growth declined and per capita GDP decreased by an average 1% per year in the 1980s, a rate worse than any other developing region, except sub-Saharan Africa. Other economic indicators also pointed in the same direction: the saving rate and investment rate dropped in the late 1980s and the export/GDP and import/GDP ratios also declined.

The disappointing economic performance of the MENA region in the 1980s can be attributed to a number of factors. Internally, a high population growth rate, poor economic management, corruption, and prolonged heavy protection led to high unemployment and economic inefficiency. It is also worth noting that during the oil boom years, despite having high domestic saving rates and high inflows of foreign aid, investment in the MENA region was mostly diverted toward consumption as well as non-productive investment.

The extent of the crisis can be seen when we look at key macroeconomic indicators for countries in the region who were to become major recipients of IMF and World Bank program loans, namely, Egypt, Jordan, Morocco, Tunisia, and Algeria. Details of the IMF and the Bank programs implemented in the above countries are listed in Appendices A and B, respectively. Macroeconomic indicators for the above five countries indicate that inflation and current account imbalances were built up in 1970s and persisted throughout the 1980s, the central government debt and total debt service ratio were also high in the 1970s and became even worse in the 1980s. With the rising debt and high inflation, gross capital formation started to decline from the early 1980s and never looked like bouncing back to the peak level of late 1970s. In light of this fall in investment, the decline in GDP per capita growth witnessed in all five countries during the 1980s seems inevitable.

However, a more nuanced analysis, which looks at the specific timing of loans and corresponding macroeconomic indicators in each recipient, suggests that the determinants of lending often do not reflect recipient economic need. Table 5 provides macroeconomic data for each of the five countries for the year in which each received its first IMF loan and for the previous five years (Egypt received two distinct phases of loans and so is represented twice). [16] By looking at the macroeconomic variables for the year in which each country

Table 4. *Selected economic indicators of the MENA 1975–2000*

Year	1975–79	1980–84	1985–89	1990–94	1995–99	2000
GDP growth (%)	6.2	2.3	1.3	4.4	2.96	3.9
GDP per capita (constant 1995 US$)	1908.5	1882.3	1759.1	1842.7	1909.1	1983.1
Gross domestic savings (% of GDP)	36.7	28.7	18.7	22.2	23.1	30.5
Gross capital formation (% of GDP)	29.5	27.4	23.6	24.6	21.7	20.4
Export (% of GDP)	42.0	36.2	23.9	32.0	30.7	37.9
Import (% of GDP)	34.8	35.0	30.1	34.5	29.3	27.9

Data source: WDI 2002 CD-ROM.

Table 5. *Macroeconomic indicators for selected countries*

	1984	1985	1986	1987	1988	1989
Algeria						
Inflation, consumer prices	8.1	10.5	12.4	7.4	5.9	9.3
Current account balance	0.1	1.8	−3.5	0.2	−3.5	−1.9
Total debt service	36.8	35.6	56.4	76.6	76.6	66.8
Gross capital formation	35.2	34.6	33.6	27.6	27.6	30.1
GDP per capita growth	2.2	0.5	−2.4	−3.5	−3.6	1.8
	1971	1972	1973	1974	1975	1976
Egypt						
Inflation, consumer prices	3.1	2.1	5.1	10.0	9.7	10.3
Current account balance	−5.7	−5.3	−5.8	−17.7	−21.2	−10.2
Total debt service	21.8	32.5	31.1	11.9	10.3	6.4
Gross capital formation	13.2	12.3	13.1	22.5	33.4	28.4
GDP per capita growth	1.6	0.2	−1.1	0.5	6.8	12.2
	1982	1983	1984	1985	1986	1987
Egypt						
Inflation, consumer prices	14.8	16.1	17.0	12.1	23.9	19.7
Current account balance	−9.9	−5.4	−8.2	−9.3	−9.4	−2.3
Total debt service	19.3	20.1	21.4	25.8	27.0	17.9
Gross capital formation	30.1	28.7	27.5	26.7	23.7	26.1
GDP per capita growth	7.1	4.6	3.4	3.9	0.1	0.0
	1984	1985	1986	1987	1988	1989
Jordan						
Inflation, consumer prices	3.8	3.0	0.0	−0.2	6.6	25.7
Current account balance	−5.3	−4.9	−0.7	−5.4	−4.6	4.4
Central government debt	49.6	56.4	59.0	70.1	100.1	126.1
Total debt service	13.0	17.2	19.7	24.0	30.9	19.7
Gross capital formation	28.8	20.5	20.5	23.3	23.5	23.7
GDP per capita growth	4.6	−0.2	3.1	−0.8	−5.2	−16.5
	1978	1979	1980	1981	1982	1983
Morocco						
Inflation, consumer prices	9.7	8.3	9.4	12.5	10.5	6.2
Current account balance	−9.9	−9.4	−7.5	−12.0	−12.1	−6.4
Central government debt	38.2	39.8	41.7	53.4	58.4	73.2
Total debt service	22.9	26.6	33.4	38.4	45.4	40.3
Gross capital formation	25.4	24.5	24.2	26.1	28.2	24.0
GDP per capita growth	0.0	2.5	1.3	−4.9	7.2	−2.7
	1981	1982	1983	1984	1985	1986
Tunisia						
Inflation, consumer prices	N/A	N/A	N/A	8.9	7.3	6.2
Current account balance	−5.4	−8.1	−6.8	−9.3	−6.9	−6.7
Central government debt	35.1	38.2	41.5	42.3	45.5	56.5
Total debt service	15.2	16.2	19.3	22.7	25.0	28.4
Gross capital formation	32.3	31.7	33.5	35.9	30.2	26.6
GDP per capita growth	2.8	−3.1	2.0	3.7	2.5	−4.5

Data source: WDI 2002.
Note: Inflation, consumer prices (annual %); Current account balance (% of GDP); Central government debt (% of GDP); Total debt service (% of exports of goods and service); Gross capital formation (% of GDP); GDP per capita growth (annual %).

received the first of its series of IMF loans and comparing them with the previous period we can see if there is evidence that the granting of the first loan coincided with severe macroeconomic distress.

(i) *Algeria*

Algeria received its first IMF Standby Loan in 1989. Comparing 1989 with the previous five years it does not seem that Algeria was in exceptional distress in terms of inflation, the current account balance, gross capital formation, or GDP growth. Indeed, GDP growth had bounced back after three years of negative growth. The only variable that shows any sign of significant deterioration is the debt service ratio, which had doubled compared to 1984. However, in the year in which Algeria was granted its first IMF program the debt service ratio was already beginning to improve. This cursory glance at the type of macro economic variables that the IMF usually considers when deciding whether a country is in need of a loan seems to suggest that Algeria's first IMF loan in 1989 cannot be explained by the standard analysis of recipient need. As will be argued below, it is possible that important changes in Algeria's domestic politics and foreign policy provide an alternative explanation of the timing of the 1989 loan.

(ii) *Egypt*

Egypt received its first IMF loan in 1976 followed by a new phase of loans that commenced in 1987. The first 1976 loan does seem to coincide with a period of increased inflation and deterioration in the current account, although debt service, gross capital formation, and GDP growth were not problematic. However, given that inflation and the current account are often regarded as critical indicators by the IMF, it would seem that the 1976 loan reflects a degree of recipient need. The picture, however, is very different for the 1987 loan. There is no indication of macroeconomic instability in 1987. Indeed, all variables apart from the GDP growth rate were improving in 1987. Although some of the improvement may be due to the IMF program itself, given that the loan was signed in May, the previous year's data, apart from inflation, do not suggest any increase in macroeconomic distress immediately prior to the loan. Again, it seems we must look for other factors, which go beyond recipient need to help explain the 1987 IMF loan.

(iii) *Jordan*

Jordan's IMF programs began in 1989. In this case there is much more evidence of macroeconomic crisis. Inflation, the build up of central government debt and GDP growth all registered a significant deterioration in 1989. The previous two years had also seen escalation in the debt service ratio. However, as we will argue below, the 1989 economic crisis in Jordan was inextricably linked with changes in domestic politics and foreign policy, both of which may also have played a part in loan timing.

(iv) *Morocco*

Morocco commenced her IMF programs in 1983 but on the macroeconomic data contained in Table 5 would not seem to be an obvious candidate for such programs. Inflation, the current account and debt service ratio all improved in 1983 and this cannot be ascribed to the IMF program itself, as the loan was not signed until September. The only variable that worsened dramatically in 1983 was the GDP growth rate, which is not a variable IMF program traditionally responded to in the 1980s.

(v) *Tunisia*

Tunisia became an IMF Standby recipient in 1986. As with Morocco, there is little sign of recipient need in terms of the standard variables of concern to the IMF. Inflation, the current account, and debt indicators were showing no notable deterioration. Again, evidence of need is limited, and it seems, as with Morocco and Egypt in the 1980s, the only obvious indicator of need contained in Table 5 is the decline in GDP per capita growth.

In summary, the 1980s, when most IMF programs in the MENA region commenced, was a period of generally deteriorating economic performance for the region as a whole. There was a clear need for both external finance to help with growing debt burdens as well as a program of economic reform to restructure many of the economies in the region and generate sustainable economic growth. Hence, the stage was set for entry of the IMF and World Bank with their stabilization and structural adjustment loans and we cannot deny the element of recipient need in this respect. However, an analysis of the exact timing of the first IMF loan in the five major recipients provides only limited evidence that economic need, as illustrated by key macroeconomic variables, was a determinant. Although it seems that Egypt's loan of 1976 and Jordan's loan of 1989 were a response to

clear macroeconomic difficulties, the evidence for Algeria, Morocco, and Tunisia as well as Egypt's 1987 loan is much less clear cut. Indeed, if anything, in Morocco, Egypt, and Tunisia it seems that the IMF was responding to the growth rate variable, which was not one of the standard macroeconomic variables one usually associates with IMF programs in the 1980s. [17] This would suggest that in many instances other factors might well have influenced the decision as to when a country is eligible to commence a series of IMF and World Bank programs. It is to this issue that we now turn.

(b) *Donor interest and the influence of the United States*

We have argued in an earlier section that there are reasons to suspect that the political interests of their major shareholders, particularly the United States, may well influence the flow of funds from the IMF and World Bank. Hence, in this section, we present a qualitative analysis of the timing of the signing of World Bank and IMF program loans in the major MENA recipients in order to see whether there is any evidence that political factors have been influential. The comparison of the timing of each loan with key domestic and international political events is a simple form of qualitative analysis based on country case studies. Hence, it is both descriptive and speculative and as such it cannot prove any causal link. We address this problem in Section 4 where we employ more formal quantitative analysis.

(i) *Jordan*

While the 1989 agreement with the IMF and World Bank largely reflected dire domestic economic conditions, Jordan's experience with both bilateral and multilateral aid, before and after 1989, presents an excellent example of the subjection of such flows to the political interests of and pressure from major western donors. Following the 1973 Arab–Israeli War and an Arab oil embargo against the United States, Washington increased pressure on the late King Hussein to sign an individual peace treaty with Israel. But with more than half of his population being of Palestinian origin, and without tacit support, if not direct participation, of the PLO, a separate peace treaty with Israel would have been tantamount to political suicide. The US "frustration with King Hussein" led to the suspension of American aid to Jordan in 1978 (Shultz, 1993, p. 454). During this period, Jordan was neither favored by the IMF nor the World Bank.

However, in the second half of the 1980s tension between Hussein and Arafat led to a rift on who should represent the Palestinians in any peace settlement with Israel. Hussein consequently reverted to an old and by now well-documented approach of continuing secret cooperation with the Israeli state (Dallas, 1999) and in 1988 severed all economic and administrative ties with the West Bank and Gaza Strip (WBG). With Jordan's Palestinians dominating the private sector, severing ties with the WBG created uncertainty with regard to their political future and presence in Jordan. They thus engaged in extensive capital flight and curtailed their investment and economic activities in the country, contributing to Jordan's first real banking and financial crisis in 1989. Within the space of six months, the Jordanian Dinar lost almost 50% of its nominal value, Jordan's external debt reached unsustainable levels and per capita income was almost halved (Kanovsky, 1989). Subsequent riots resulted in a tactical move by King Hussein; he restored parliamentary elections in 1989 (suspended since the 1976 war), and within a span of two years abolished martial law, legalized political parties, and sanctioned greater freedom of press. In July 1989, the IMF granted Jordan an SDR 60 million Standby Agreement and the World Bank provided a US$160 million SECAL for the industrial and trade sectors. In view of the above we can speculate that the complex interaction of the stance toward Israel and the WBG, the ensuing economic crisis, and the attempted panacea in the form of political liberalization, all played a role in qualifying Jordan for IMF and World Bank support in 1989.

With strong domestic opposition to foreign intervention in the region, Jordan took a neutral stand in the 1990–91 Gulf war and refused to openly support US-led attacks against Iraq. This led to a complete halting of aid flows to Jordan from the United States and its Arab allies in the Gulf and the temporary suspension of the IMF and World Bank agreements with two-thirds of the IMF Standby funds not being drawn. Squeezed financially, isolated internationally, and ostracized regionally the US-led pressure had the desired effect of prompting an "alliance shift" (Brand, 1994, p. 20). Hus-

sein soon criticized Saddam Hussein and openly talked about regime change in Iraq, and went further by hosting Iraqi opposition leaders. Following this revised stance, a new SDR 44.4 million Stand-By Agreement was signed with the IMF in February 1992.

Since the mid-1990s, Jordan has been further rewarded for her peace overtures to Israel. In 1993, Jordan started direct negotiations with Israel under the Oslo Accord of 1991–92, leading in October to a Common Agenda agreement on issues related to territory and water, refugees, and arms control. In the same month, the World Bank granted Jordan a second US$80 million SECAL for the energy sector. This was followed in May 1994 by a SDR 130 million IMF Extended Fund Facility. In 1994, Jordan formally signed a peace treaty with Israel in *Wadi Araba*, formally ending the 46-year-old state of war between the two countries. Since then, Jordan has not only become one of the largest recipients of US aid in the world, but also the recipient of a further six World Bank loans and three IMF loans. The political timing of many of these loans deserves attention. The third World Bank US$80 million SECAL for the agricultural sector came only three months after the *Wadi Araba* Agreement was signed. In the same year, the United States wrote off US$833 million of Jordan's debt and began providing Jordan with advanced weaponry. The fourth SECAL for the same amount came in October 1995, less than a month after Jordan's support for the OSLO II Accord under which Israel agreed to a partial withdrawal from the West Bank with administrative powers to be given to the Palestinian Authority.

In light of the above analysis, it would seem that the timing of at least seven of the 14 program loans that Jordan has received from the Bank and the Fund since 1989 may well have been influenced by Jordan's stance on Middle East affairs.

(ii) *Algeria*

Throughout the 1970s and 1980s, Algeria was considered a rogue state by the non-communist west. In 1974 the country firmly rejected the ''open door policy'' (infitah) adopted by Egypt and much of the Arab world which involved a shift in the balance of domestic economic power to the private sector, opening up to western investment and accepting the hegemony of the United States. Instead, in 1976 President Boumedienne adopted a new socialist constitution and Islamic state, with the Islamist movement further promoted by his successor President Chadli Benjedid. During this period, which witnessed rapid industrialization and the successful development of domestic oil and gas, the west remained hostile to Algeria's anti-American regime (Pfeifer, 1996; Swearingen, 1996). In 1980, Algeria embarked on a successful liberalization program designed to overcome the inefficiencies created by the previous import substituting industrialization strategy. Although the program was not dissimilar to a standard IMF and World Bank package, Algeria, unlike its Western friendly neighbors Morocco and Tunisia, received little assistance. While Morocco and Tunisia had more than a third of their annual external debt on concessional terms, Algeria was forced to finance its reform program in the early and mid-1980s with market-based loans with only 3% of her debt on concessional terms.

But reforms, associated with external borrowing on unfavorable terms, induced a ballooning in foreign debt. The collapse of oil and gas prices in 1986 followed by a large devaluation in 1988 contributed to escalating inflation and unemployment, which triggered strikes, riots, and growing domestic opposition to the regime. The economic and political crisis prompted a shift in both domestic and international policy. In 1988, a new constitution restricting the military and allowing opposition parties was introduced. In early 1989, Algeria joined the new Arab Maghreb Union (UMA) which was committed to preventing the spread of radical Islam and fostering closer links between the Maghreb and the European Union. As in Jordan, Algeria's new pro-western stance combined with domestic political liberalization was a signal for the arrival of the World Bank and IMF. In May 1989, the Fund granted a SDR 156 million Standby followed in August 1989 by a US$300 million Structural Adjustment Loan from the World Bank. In total, during 1989–99 Algeria received four IMF stabilization loans (as well as a Compensatory Financing Facility) and four World Bank adjustment loans. The timing of several of these, as argued below, is noteworthy.

President Benjedid's political liberalization backfired producing unexpected support for the Islamic opposition. The Bank and the Fund responded in June 1991 by offering the embattled regime a SDR 300 million Standby and a US$350 million Structural Adjustment Loan

(the largest ever Bank program loan to any country in the MENA region). The army, shaken by the Islamists' overwhelming victory in local elections, stepped in on January 1992, deposed Bendjedid, and cancelled the elections. A retired army general, Liamine Zeroul, was appointed by the army as head of the state in January 1994, and confirmed President after the 1995 elections. The disposition of Benjedid and cancellation of elections ushered in a new and bloody era in Algeria's history, characterized by two main features. First, brutal repression of Islamists and other opposition in what became known as the "dirty war." Second, the growth of a radical opposition Islamic movement coincided with the new post-Cold War American view of Islam as the new communism. Therefore, the new Algerian military-backed regime used the so-called war on terror to build closer relations and links with the United States. In March 1993, Algeria broke off diplomatic relations with Iran, after years of cultivating links with Tehran, which it now blamed for exporting Islamic revolutions to the Arab World. At the same time, Algeria withdrew its ambassador from Sudan, another country described by US officials as a rogue and anti-western state (EIU, 2001, pp. 14–15). In May 1994, Algeria was rewarded with a SDR 457 million IMF Stand-By Arrangement.

In late 1994, Algeria also vigorously supported, along with Egypt, an anti-terrorist code of conduct at the Casablanca Islamic Summit. A few months later in January 1995, Algeria received a US$150 million World Bank Economic Rehabilitation Support Loan, followed in May 1995 by the largest ever IMF Extended Fund Facility in the region of SDR 1.2 billion. The latter came to an end in May 1998, and was associated with unexpected macroeconomic success, mostly caused by improved global prices and demand for gas.

In late 1998, President Zeroual announced that he would stand down and that elections would be brought forward to early 1999. One day before the voting began in the delayed April 1999 elections, all candidates, except Mr. Abdelaziz Bouteflika, pulled out due to credibility problems. This left Mr. Bouteflika, who was supported by a pro-western, anti-Islamist powerful coterie of senior army officers and state officials, to become Algeria's seventh President. His first years of rule were marked by intensified violence and further crackdown on Islamists. To help bolster Mr. Bouteflika's position, particularly following the decline in oil prices in late 1998 and the rise of debt service ratio to 46%, the IMF extended a Compensatory and Contingency Financing Facility of SDR 223.5 million in May 1999.

(iii) *Egypt*

Egypt was the first Arab state to sign a peace treaty with Israel in 1978, hence formally ending the state of war between the two countries. Since then, Egypt has become a favored recipient of US aid, despite its appalling human rights record. Although Egypt has had relatively few Bank and Fund program loans, [18] what is noteworthy is that Egypt has continued to receive such loans despite the disappointing pace and quality of reform which falls significantly short of that in Morocco and Tunisia as well as in Jordan after 1999. In addition, the timing of two of these loans was undoubtedly influenced by political factors. Without Egypt, there would have been no Arab stance supportive of the US-led coalition in the 1990–91 war against Iraq. Egypt mobilized Arab support for the war and held an emergency Arab Summit for that purpose in 1990. Unlike Jordan, Egypt also sent troops to fight alongside the American forces in liberating Kuwait. Three months after the war ended in May 1991, Egypt was rewarded with a SDR 234 million IMF Standby Loan and a US$300 million Bank Structural Adjustment Loan. Egypt also received more than $15 billion of debt write-off from the west for its efforts and strong support for the allies during the 1990–91 war, the highest level of debt forgiveness in the history of MENA.

(iv) *Tunisia and Morocco*

Tunisia, like Morocco, has long been regarded as a friendly pro-Western regime within MENA. Consequently, both Morocco and Tunisia have been treated favorably first by the European Union, and later, by the IMF and World Bank. During 1982–2003, Morocco had six debt rescheduling agreements with the Paris Club and three with private international banks, received 15 World Bank Structural and Sectoral Adjustment Loans and seven Stand-by and Extended Facilities from the IMF. Morocco has also long been the recipient of generous American military support. Over the same period, Tunisia received nine World Bank Structural and Sectoral Adjustment loans in addition to five years of continuous IMF financial support. Such treatment compares very

favorably with their less America-friendly neighbors such as Algeria in the 1980s and Libya in the 1980s and 1990s.

It has been argued that Washington not only used its influence inside international financial institutions to soften IMF and World Bank conditionality in Morocco and Tunisia as well as the WTO's entry requirements, but also, along with the European Union and Japan, "repeatedly and generously lubricated" their reform efforts by "financial assistance to ease the pain and political costs to the regime of early austerity phases" (Pfeifer, 1999, pp. 23 & 25–26). It would seem that in these MENA countries US officials hoped, by providing friendly regimes with financial and military support and by developing them into regional showpieces of globalization, that this would stabilize the regimes of their Arab allies (Alexander, 1996; Waterbury, 1998).

Morocco has been such a massive and continuous recipient of Bank and Fund program loans that it is difficult to link key domestic and international political events to the timing of such loans. However, its efforts in supporting the 1991 Gulf war, including sending 1,200 of her troops, was rewarded handsomely with more than US$5 billion in debt forgiveness from the United States and Arab oil-rich states. Political liberalization in late 1997 and early 1998, with parliamentary elections resulting in the first change over of political power in the Kingdom's history, was followed by three World Bank loans over the next year totaling US$450 million.

Tunisia has long pursued a pragmatic pro-Western foreign policy (Murphy, 2002). However, a significant shift in domestic politics occurred in late 1987 with the coming to power of General Zine Ben Ali. Ben Ali's new regime, claiming an attempted Islamic coup, rapidly cracked down on the Islamic movement, arresting the head of the main opposition the Movement de la Tendance Islamique. In early 1989, the regime signaled a further shift against Islamic politics in favor of a pro-western stance by joining the Arab Maghreb Union designed to prevent the spread of radical Islam and foster closer links with the European Union. The response of the Washington-based international financial institutions mirrors that in Algeria. The crackdown on Islam was followed by both a Bank and Fund loan the following year, while joining the Maghreb Union was followed within four months by two further Bank Sectoral Adjustment Loans.

4. LOAN TIMING: A MORE FORMAL QUANTITATIVE ANALYSIS

The above has provided a simple descriptive analysis of the timing of IMF and World Bank program loans to MENA recipients in order to try and isolate the influence of both economic need and key domestic and international political events. The results suggest that although in some cases recipient economic need, as signaled by a deterioration in key macroeconomic variables, is a determinant of the start of IMF (and usually World Bank) lending, such loans also seem to be influenced by political events in the recipients that curry favor with US policy in the region. However, so far the analysis lacks rigor. In order to strengthen and advance our argument we now use a more formal quantitative approach.

In this section, we employ a Probit model to investigate what factors influence IMF loans to MENA countries. [19] The dependent variable is IMF coded either one, if a country signed an agreement (including SAF, ESAF, and PRGF) in year t, or zero, otherwise. Based on the previous discussion, three sets of variables are included in the regression: economic need, US influence, and domestic political factors. Independent variables representing economic need consist of GDP per capita, GDP growth rate, debt service ratio, short-term debt as percentage of total debt, balance of payments, and changes in national reserves. [20] US influence is captured by the dummy variable PEACE, which indicates whether a country signed a peace treaty with Israel or not. Two variables are used to capture the domestic political factors: DEM—the democracy index (ranging from one to seven, one is the highest level of democracy, seven the lowest), and DELEC—the legislative election year. [21]

The estimation is conducted in a pooled sample with 11 countries from 1975 to 2000. The detailed variable definition, data sources, and the country list are reported in Appendix C. Following the standard procedure, the sample was limited to years in which a country was not under a previously agreed IMF program, and the explanatory variables—LGDPPC, GDPG, CAB, TDEBTS, and SDEBT are lagged by one year to avoid simultaneity bias. [22]

The first stage of the analysis focuses only on the economic variables, which may reflect the presence of a financial or macroeconomic problem that might prompt the government to approach the IMF for resources and which may

be used by the IMF to decide on loan eligibility. The results for the corresponding economic model are reported in Table 6. The coefficients on GDP per capita (LGDPPC[−1]), total debt service ratio (TDEBTS[−1]), and changes in net reserves (D(RES/GDP)) are all significant and with the expected signs indicating that a MENA country with low GDP per capita, high debt service ratio, and experiencing a sharp decline in reserves is likely to receive IMF assistance. The coefficient on the current account balance (CAB[−1]) is not significant and the coefficients on GDP growth (GDPG[−1]) and short-term debt (SDEBT[−1]) are significant but with unexpected signs.

Although the above economic approach provides some useful insights into the determinants of IMF programs, it suffers from specification error due to the omission of relevant variables (e.g., variables that capture political factors which we know from our above literature review and qualitative analysis are likely to be important). Consequently the economic model has low explanatory power (measured by an R^2 of 0.194) and a low correct prediction ratio. As can be seen from the bottom of Table 6 the number of observations for receipt of a loan is 23 but our economic model only correctly predicts 5 of these. [23]

Table 6. *Probit analysis of the determinants of IMF agreements*[a]

Variables		Economic model		Supplemented model	
LGDPPC[−1]		−0.659		−0.337	
		(0.279)**		(0.445)	
GDPG[−1]		0.058		0.042	
		(0.033)*		(0.045)	
CAB[−1]		−0.015		0.038	
		(0.023)		(0.037)	
TDEBTS[−1]		0.039		0.033	
		(0.013)***		(0.017)**	
SDEBT[−1]		−0.060		−0.065	
		(0.023)***		(0.037)*	
D(RES/GDP)		−5.731		−6.972	
		(3.46)*		(4.426)†	
DEM[−1]				−1.008	
				(0.445)*	
DELEC[−1]				0.6000	
				(0.535)	
DELEC				0.694	
				(0.601)	
DELEC[+1]				0.832	
				(0.505)*	
PEACE				1.052	
				(0.481)**	
Constant		3.197		5.804	
		(1.941)*		(3.089)**	
Number of observation		165		154	
		Predicted		Predicted	
		0	1	0	1
Actual	0	139	3	125	6
	1	18	5	7	16
Log likelihood		−48.8***		−31.4***	
Chi squared		35.6***		67.1***	
R^2 (ML)		0.194		0.353	

[a] Standard errors are in parentheses.
***, **, * and † indicate that the coefficient is significantly different from zero at the 1%, 5%, 10% and 15% levels, respectively.

In order to try and improve the model, the two sets of political variables are added into regression. The results for the corresponding supplemented model are reported in the third column of Table 6. The coefficients on GDP per capita (LGDPPC[−1]) [24] and GDP growth (GDPG[−1]) are no longer significant; the coefficient on the current account balance (CAB[−1]) is still insignificant; and the coefficients on short-term debt (SDEBT[−1]) [25] and the change in reserves (D(RES/GDP)) changed slightly in terms of magnitude. For those political variables, the dummy PEACE is positive and significant, the democracy index DEM is negative and significant, and the dummy for the year after a legislative election DELEC[+1] is positive and significant. This suggests that MENA countries which have signed a peace treaty with Israel, that have just had a legislative election and are democratic are likely to receive an IMF loan. In the supplemented model, the R^2 statistic is much higher at 0.353 and the correct prediction ratio of the positive value (sign an agreement with IMF) is 16 out of 23, which is a big improvement, compared to the economic model. [26]

The above results clearly show that in trying to predict when the IMF will sign a loan agreement with a MENA country the model which incorporates both political and economic variables is superior to a purely economic model. Our supplemented model indicates that whether a country receives an IMF program is influenced by both economic and political factors, particularly the latter. The only economic variables in the supplemented model that have the predicted sign and are significant are the change in foreign reserves and total debt service—a decline in reserves or a high debt service ratio are good predictors of an IMF program. This finding can be further supported by the fact that 20 out of 28 IMF programs in MENA were accompanied by a Paris Club debt relief or reschedule agreement. Hence, IMF programs seem to clearly coincide with debt problems and the need to save foreign reserves. Along with the two economic variables, signing a peace treaty with Israel and improving democracy also increase the likelihood of reaching an agreement with the IMF. The existence of political business cycle also plays its part in that we have found that MENA governments are more likely to enter into an agreement with the IMF in the year after the legislative election.

The formal results from the Probit model lend support to our more qualitative analysis. They show that economic need alone does not really explain the timing of IMF loans. However, political liberalization, which often sees the incumbent regimes challenged by Islamic opposition, seems to have an influence as shown by the significance of the democracy and election variables. Likewise, a change in foreign policy stance represented by signing a peace treaty with Israel is a good predictor of IMF loans.

5. LINKING THE QUALITATIVE AND QUANTITATIVE ANALYSIS

The quantitative Probit model work can be used to identify outliers (those cases that the model fails to predict) which, in an iterative research process, could then be re-examined by way of the qualitative case study type work [27] Cases were no program was introduced despite the model's prediction of a loan are: Egypt 1985, 1986, 1989; and Morocco 1979, 1994, 1997. Cases were a program was put in place but not predicted by the model are: Egypt 1976, 1987, 1996; Jordan 1989, 1992; Tunisia 1986 and Yemen 1997. It is beyond the scope of this paper to return to extensive qualitative country case study analysis to explain these outliers. However, two general factors help account for the outliers. Firstly, the problem of missing variables, that is, our model may exclude some important variables which are determining factors in individual cases. For example, the cases of IMF loans to Egypt in 1976 and Jordan in 1989 may be partially explained by the use of such loans by the United States and other Western powers to help facilitate the peace process between these two countries and Israel prior to the signing of a Peace Treaty. Jordan's 1992 loan was largely the product of the Gulf War and Yemen in 1997 is a special case since its IMF loan took the form of an ESAF accompanied by a PRGF.

A second general explanation of outliers might be the fact that in some instances the signing of an IMF agreement might be delayed despite the existence of predictive events. A typical example might be Egypt where our model incorrectly predicted agreements in 1985 and 1986 yet failed to predict the 1987 agreement. The fact that Egypt's IMF program in the mid-1970s sparked serious food riots, as well

as Egypt's access to generous assistance from the United States in times of economic need, might explain why there was a delay in reaching another IMF agreement. As can be seen from Table 5, economic conditions started to deteriorate in 1982 and yet an agreement with the IMF was not reached until 1987. This was despite the fact that in 1985 and 1986, when the model incorrectly predicted an agreement, overall economic conditions were much poorer than the following year when the agreement was eventually signed.

6. CONCLUSION

Our qualitative and quantitative analysis enables us to conclude that both recipient need and donor interest influence the granting of IMF and World Bank program loans to countries of the MENA region. This is not surprising given that our literature review indicated that most empirical studies of aid allocation find that donor interest, including geo-political interest, influences who gets what in terms of aid. The generally accepted view is that donor interest plays a more important role in bilateral aid allocation than in multilateral aid allocation. This may be so, but we have identified important reasons why the major western shareholders might be able to influence the flow of funds from the two major Washington-based multilaterals. Given its voting power in both the Bank and the Fund, the United States is in a particularly influential position.

Our qualitative analysis focused on the five major MENA recipients of IMF and World Bank program loans—Algeria, Jordan, Morocco, Tunisia, and Egypt. Looking at each country's macroeconomic performance in the year in which they commenced their first phase of program loans, we see very little evidence of economic need. Only in the case of Jordan in the late 1980s and Egypt in its first phase of loans during the mid-1970s do we see any clear sign of recipient economic need in terms of a significant deterioration in the macroeconomic indicators that the IMF is usually concerned with. It seems therefore that we must look to other factors to explain the IMF and World Bank engagement with Egypt in the 1980s and with Morocco, Tunisia, and Algeria. In all cases a cursory political analysis would indicate that a shift toward a pro-western foreign policy, peace overtures to Israel, domestic political liberalization, and the often related challenge to the regime by Islamic opposition prompt an inflow of funds not just from the United States but also from the Bank and Fund. Even in the case of Jordan, which became a recipient of such loans in 1989, the severe economic crisis of that year was inextricably linked with such foreign policy and domestic political events.

The above findings are further supported by our more formal quantitative analysis. Using a Probit model to estimate the determinants of IMF lending in the region we found that a model that only includes variables representing recipient need performs very poorly. However, once we include foreign policy and political variables the model performs extremely well. In this supplemented model the only economic variables that help to predict whether a MENA country will be granted an IMF loan are a change in foreign reserves and total debt service—a decline in reserves or a high debt service ratio are good predictors of an IMF program. Signing a peace treaty with Israel improves a country's chance of a loan as does improving democracy. Related to the latter, we also found that holding an election is likely to be followed by an IMF loan in the post-election year.

The above findings are important, not just because they add to an already large body of empirical work on the determinants of aid allocation, but also because they have important policy implications. The fact that IMF and World Bank lending in MENA seems to be orientated toward pro-western regimes that introduce western-style democracy, and adhere to US foreign policy interests in the region suggest that factors other than recipient need are influencing global aid allocations. This has two important implications, which go beyond the scope of this paper. Firstly, it may well reduce the developmental impact of a scare resource, namely aid. Low income countries or those that can use aid to the best effect, may not receive as much aid as wealthier countries or countries with weak policies, where aid has been shown to be less effective (Burnside & Dollar, 2000). As Collier and Dollar (2002) have argued, a more poverty-efficient allocation of aid has the potential to double the number of people lifted out of poverty from 10 to 20 million.

Secondly, the politically motivated flow of funds to MENA may well trigger adverse social and political effects. Program loans from the IMF and World Bank have economic liberalization conditions attached to them. Such reform conditions, although they often have the

potential to bring significant economic gains, may well have negative social ramifications in the recipients unless adequate social safety nets are in place. For example, reforms such as privatization, removal of state subsidies on foodstuffs, devaluation, and trade liberalization can potentially increase unemployment and income inequality as well as reduce real incomes of the poor. This, in turn, may lead to the growth of anti-reform movements challenging incumbent regimes. There is already ample anecdotal evidence that this has occurred. The 1990s and the first four years of the 21st century have witnessed a rise in the number and forms of distributive conflicts in the Arab World, including riots, demonstrations, strikes, violence, assassinations, clashes with labor unions and university students in addition to an increase in crime rate (Ayubi, 1995; Economist, September 5, 2002; El-Ghonemy, 1998; Richards & Waterbury, 1996; Shafiq, 1998). Quite often this unrest has an explicitly anti-western, anti-globalization, and anti-IMF focus. In some instances, such as in the riots in Jordan in April 1989 and August 1996 prompted by the IMF-induced lifting of price supports, the IMF and the World Bank were viewed by many of the opponents of reform as synonymous with the American presence and interests in the region. If this persists, the very regimes that America and the west are trying to support with funding and reform packages may well not survive.

Many such opposition movements have centered on Islamic-based political parties. Political Islam and Islamic fundamentalism should not be confused. But a vicious cycle of declining social welfare caused by possible effects of economic liberalization, increased domestic opposition to pro-western local regimes implementing such programs, and repression of such opposition by the same regimes is likely to force frustrated religiously based political groups into increasingly extremist responses as well as enhancing their appeal to impoverished and disaffected members of society.

The general influence of the IMF and World Bank in MENA, the welfare effects of IMF and World Bank programs in MENA countries as well as local perceptions of these two institutions is hence an area that deserves further research. It may well be that in view of the fact that IMF and World Bank funds have accounted for only a small percentage of the flow of funds into the region (see Table 1) that their influence over policy and liberalization is correspondingly small. In addition, the very fact that the flow of funds is politically motivated may mean that the conditions attached to these funds are weak. Indeed, both these factors help explain why the Bank and the Fund have had relatively little influence over the economic reform process in Egypt in comparison with the influence of USAID. On a more general global level, there is a growing body of literature that suggests that IMF conditionality is not effective in obtaining intended reform outcomes (Dollar & Svensson, 2000; Goldstein, 2003; Mercer-Blackman & Unigovskaya, 2004; Mussa & Savastano, 2000) and that it does not have a catalytic effect in terms of access to the international capital market (Bird, 1996; Bird & Rowlands, 1997, 2000, 2001, 2002; Rodrik, 1995; Rowlands, 1996). If the latter is the case, then effectiveness of granting or withholding IMF and Bank loans in terms of the carrot and stick effect is severely weakened. On the other hand, there are many, including many groups and individuals in MENA countries, who continue to believe that the IMF and World Bank wield considerable influence over their economies. The basis, origin, and accuracy of such beliefs in the specific context of MENA countries are essential area of future research.

NOTES

1. The World Bank definition of MENA includes: Algeria, Djibouti, Egypt, Iran, Iraq, Jordan, Lebanon, Libya, Malta, Morocco, Oman, Palestine, Saudi Arabia, Syria, Tunisia, and Yemen. It does not include the high-income countries of the Gulf, nor Israel and Turkey, nor Sudan and Mauritania which although predominantly Arab countries face challenges more typical of sub-Saharan Africa. In our general discussions of aid allocations we use the same country grouping as the Bank, although also include reference to Israel, a major recipient of US aid. Although Turkey could be considered part of MENA in political, cultural, and geographic terms, and is also one of the most important countries in the region in terms of USA foreign policy, she is not generally considered part of MENA in economic terms. This fact, along with her close ties with Europe and moves to join the European Union in the near future, mean we have taken the standard definition of MENA and excluded Turkey from our analysis.

2. For an excellent survey and methodological critique of this work, see McGillivray and White (1993).

3. Western aid to Mobuto's Zaire or Marcos's Philippines designed to bolster anti-communist pro-western regimes are good examples.

4. Post 9/11 the United States has been increasingly forthright in suggesting that the War on Terror and US security are important reasons for foreign aid (www.usaid.gov/fani/overview, p. 2). Likewise, when President G.W. Bush proposed the first significant increase in US development assistance in a decade, he offered the following justification when speaking at the United Nations Financing for Development meeting in Monterrey, Mexico in March 2002: "We fight poverty because hope is an answer to terror."

5. In terms of destination of aid in the MENA region, DAC aid is quite concentrated. During 1961–2001 Egypt and Israel accounted for more than 60% of DAC aid into the region, followed by Morocco 8.0%, Jordan 5.3%, and Tunisia 4.5%.

6. Donor interest includes pursuit of commercial interests via the promotion of donor trade or investment opportunities by allocating aid to countries most likely to absorb donor exports and investment. It also includes the pursuit of political, diplomatic and strategic objectives in order to create an international environment, which favors the donor. According to Feeny and McGillivray (2002, p. 3): "This can involve allocating aid to countries which are in a strategic geographic location or which have particularly close diplomatic ties with the donor. It can even involve rewarding countries for particular actions with increased aid or punishing others with reduced or continually low or zero levels of aid."

7. We ran our regressions for three dependent variables—US aid, bilateral aid excluding the United States, and multilateral aid and found that donor interest has the strongest effect on the allocation of US aid, and also that non-US bilateral aid responded more to donor interest than did multilateral aid.

8. The US–Egypt dummy parameter in Berthelemy and Tichit's study was particularly large in the 1980s subperiod following the Camp David Peace Accord with Israel and the analysis suggested the privileged assistance enjoyed by Egypt from the United States translated into an aid bonus of US$49 per capita.

9. A surprising result is that Turkey has a negative fixed effect coefficient for US aid compared to the positive coefficient for non-US aid, despite the geopolitical importance of Turkey to the United States. This might be explained by two factors. Firstly, the fixed effect coefficients capture time invariant linkages. It may be the case that compared to the United States other DAC countries, especially the European donors which are major donors to Turkey, have more stable relationships with Turkey which are stronger over time. Secondly, fixed effects coefficients are only a proxy for donor–recipient long-term linkages and may not always be accurate in individual cases.

10. IBRD Articles of Agreement IV: operations, Section 10; IDA Articles of Agreement V: operations, Section 6.

11. A country's voting power is not the same as its voting weight: its power is its ability to decide the issue when a vote is taken whereas its weight is just the number of votes it has the right to cast. Voting power is calculated by analyzing all the voting outcomes that can occur, and in each case investigating the ability of every member to be decisive—that is to be the one member who can decide whether the vote leads to a decision or not.

12. The bulk of the studies have concentrated on the determinants of IMF rather than World Bank lending. The reason seems to be twofold. Firstly, an IMF agreement is usually a pre-requisite for a Bank program loan and most IMF agreements are followed by such a loan. Hence, many of the determinants of an IMF agreement will also be determinants of the Bank's activities. Secondly, the aspects of recipient need that the IMF is meant to respond to, namely inflation, balance of payments and budget deficits are much easier to measure than the more medium term supply side determinants of World Bank program loans (structural imbalance, developmental indicators etc.). Hence, from a methodological standpoint it is much easier to construct the independent variables in an equation estimating the determinants of IMF loans than those that would need to enter such an equation for World Bank program loans.

13. It should be noted that Bird and Rowlands report in a footnote to their paper that they were unable to replicate some of Thacker's results.

14. Dreher and Vaubel (2004) also took loan conditionality as the dependent variable and found that the number of conditions per IMF loan was positively related to prior use of Fund credit relative to quota and to the number of World Bank adjustment loans, as well as being positively related to world interest rates and recipient monetary expansion and negatively related to recipient international reserves.

15. Reliance on oil took two forms, direct and indirect. Direct reliance refers to the oil export countries which include OPEC countries in the region, along with Egypt and Yemen. Indirect reliance refers to those countries, especially Jordan, Egypt, and Yemen, who received large remittances from the oil rich GCC countries.

16. We look at IMF loans rather than World Bank program loans because the former are almost always a prerequisite for the latter.

17. The traditional division of labor in the 1980s was that the IMF would take care of balance of payments problems while medium term growth would be the concern of the World Bank (Mosley, Harrigan, & Toye, 1995, vol. 1, pp. 51–56).

18. Egypt received only three World Bank SALs (two of which were in the 1970s) and four IMF program loans.

19. Again only IMF programs are considered here due to the fact that the World Bank's SALs or SECALs are generally preceded by an IMF program. The Probit model can be used to determine the eligibility of receiving aid as opposed to the amount received. Hence, the dependent variable takes the value of one or zero depending on whether each country in the sample receives aid in a give year or not. In our case we use the Probit model to predict whether a country receives an IMF loan.

20. In our descriptive case country analysis of the previous section, we also used inflation and investment rates as indicators of macroeconomic instability. We have excluded these variables from our Probit model due to the problem of multicollinearity. For example, it is not appropriate to use both the investment rate and GDP growth variable in such an analysis since the former is an important determinant of the latter. We did however run the regression with an inflation variable (both consumer price index and GDP deflator) but both were insignificant and did not improve the performance of the model. This is probably due to the problem of collinearity, with the correlation between inflation and total debt service being −0.606. The way to overcome this problem is to drop one variable. We kept debt service instead of inflation for two reasons. Firstly, the result is slightly better when debt service is included. Second, MENA countries tend to consult the IMF for debt problems in the first instance—20 out of 28 IMF programs in MENA were accompanied by Paris Club debt relief or rescheduling agreements.

21. In the interest of parsimony we had to restrict the number of explanatory variables introduced in the model. Much of the aid allocation literature uses a variety of variables to capture political influences, for example, political instability variables, UN voting patterns. However, increasing the variables enhances the problem of multicollinearity and reduced degrees of freedom due to both increased number of explanatory variables and an increased number of missing observations. Exclusion of such variables does not imply that they are not important in predicting the likelihood of an IMF loan. However, it is not our purpose to identify all determining factors and their weights in the loan granting decision process. Rather, we aim to establish that loan disbursement is not exclusively determined by recipient economic need but is also influenced by political factors.

22. The results using a one year lag are consistent with the results when economic variables are not lagged. The use of two or three year lags is not suitable for this type of study due to the nature of IMF lending. The IMF is meant to provide assistance to a country only at the actual time when the general macroeconomic condition is deteriorating; hence a longer lag structure would significantly reduce the explanatory power of the macroeconomic variables.

23. The actual number of observations for no IMF loan is 142 and of these the economic model correctly predicts 139 (and incorrectly predicts 3). But it should be noted that most Probit model analysis scores highly on predicting the zeros in the observations of the dependent variable.

24. The coefficient on LGDPPC[−1] is sensitive to whether we include a constant or not. When the constant is excluded, the coefficient is negative and significant.

25. Short-term debt as percentage of total debt has a negative impact on receiving an IMF loan, which is not expected. However, when we checked the debt structure of MENA countries, we find short-term debt has been in decline since the early 1980s, and more than two-thirds of their long-term external debt is from official sources. If the government's desire to sign an agreement with IMF is designed to help initiate the process of long-term debt relief from major donors this would explain the negative coefficient on short-term debt. The smaller the percentage of short-term debt (and hence the larger the percentage of official long-term debt) the more likely it becomes that an IMF agreement will be signed.

26. Given this study is based on a relatively small sample, those figures are very respectable. Bird and Rowlands (2003) have shown that a common feature of this genre of research is its arguably low explanatory power overall. Although the percentage of correct prediction was often 80% and 90%, it has to be recalled

that these numbers corresponded roughly to the percentage of countries without agreements.

27. Some authors, for example, Bird and Rowlands (2002) have had to analyze the outliers in such a way because their addition of political variables into the regression did not improve the explanatory power of the model or the rate of correct predictions. This is not the case in our analysis. As shown in Table 6, the R^2 increases from 0.194 to 0.353 and the rate of correct prediction of the signing of an agreement also increases significantly from 5 to 16 once political variables are introduced. Nevertheless, it is interesting to identify and discuss outliers.

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APPENDIX A. HISTORY OF IMF LENDING ARRANGEMENTS IN MENA

	Date of arrangement	Date of cancellation	Amount agreed	Amount drawn	Amount outstanding
Algeria					
Extended fund facility	May 22, 1995	May 21, 1998	1,169,280	1,169,280	525,487
Standby arrangement	May 27, 1994	May 22, 1995	457,200	385,200	0
Standby arrangement	Jun 03, 1991	Mar 31, 1992	300,000	225,000	0
Standby arrangement	May 31, 1989	May 30, 1990	155,700	155,700	0
Egypt					
Standby arrangement	Oct 11, 1996	Sep 30, 1998	271,400	0	0
Extended fund facility	Sep 20, 1993	Sep 19, 1996	400,000	0	0
Standby arrangement	May 17, 1991	May 31, 1993	234,400	147,200	0
Standby arrangement	May 15, 1987	Nov 30, 1988	250,000	116,000	0
Jordan					
Standby arrangement	Jul 03, 2002	Jul 02, 2004	85,280	10,660	10,660
Extended fund facility	Apr 15, 1999	May 31, 2002	127,880	127,880	127,880
Extended fund facility	Feb 09, 1996	Feb 08, 1999	238,040	202,520	113,738
Extended fund facility	May 25, 1994	Feb 09, 1996	189,300	130,320	35,205
Standby arrangement	Feb 26, 1992	Feb 25, 1994	44,400	44,400	0
Standby arrangement	Jul 14, 1989	Jan 13, 1991	60,000	26,800	0
Morocco					
Standby arrangement	Jan 31, 1992	Mar 31, 1993	91,980	18,396	0
Standby arrangement	Jul 20, 1990	Mar 31, 1991	100,000	48,000	0
Standby arrangement	Aug 30, 1988	Dec 31, 1989	210,000	210,000	0
Standby arrangement	Dec 16, 1986	Apr 30, 1988	230,000	230,000	0
Standby arrangement	Sep 12, 1985	Dec 15, 1986	200,000	10,000	0
Standby arrangement	Nov 15, 1959	Mar 15, 1985	833,250	0	0
Standby arrangement	Sep 16, 1983	Mar 15, 1985	300,000	300,000	0
Tunisia					
Extended fund facility	Jul 25, 1988	Jul 24, 1992	207,300	207,300	0
Standby arrangement	Nov 04, 1986	May 31, 1988	103,650	91,000	0

Source: IMF (amount in thousands of SDR).
Note: Seven cases are not reported here: Djibouti, 1996 SAF and 1999 PRGF; Yemen 1996 SAF and 1997 PRGF and ESAF; Egypt 1976, SAL and Morocco, 1980 SAL.

APPENDIX B. HISTORY OF WORLD BANK LENDING ARRANGEMENTS IN MENA

Project name	Commitment US$ million	Country	Date of approval
Economic Reform Support Loan	300	Algeria	Aug 31, 1989
Enterprise and Financial Sector Adjustment Loan	350	Algeria	Jun 21, 1991
Economic Rehabilitation Support Loan	150	Algeria	Jan 12, 1995
Structural Adjustment Loan	300	Algeria	Apr 25, 1996
Agricultural Industrial Imports	70	Egypt	Dec 03, 1974
Agricultural Industrial Imports (02)	70	Egypt	Jun 14, 1977
Structural Adjustment Loan	300	Egypt	Jun 21, 1991
Industry and Trade Policy Adjustment Loan	150	Jordan	Dec 14, 1989
Energy Sector Adjustment Loan	80	Jordan	Oct 07, 1993
Agriculture Sector Adjustment Loan	80	Jordan	Dec 08, 1994
Economic Reform and Development Loan	80	Jordan	Oct 24, 1995
Economic Reform and Development Loan (02)	120	Jordan	Dec 11, 1996
Economic Reform and Development Loan (03)	120	Jordan	Jun 01, 1999
Public Sector Reform Adjustment Loan	120	Jordan	Jun 21, 2001
Public Sector Reform Adjustment Loan (02)	120	Jordan	Jul 02, 2002
Industrial and Trade Policy Adjustment Loan	150.4	Morocco	Jan 31, 1984
Agricultural Sector Adjustment Loan	100	Morocco	Jun 20, 1985
Industrial and Trade Policy Adjustment Loan (02)	200	Morocco	Jul 16, 1985
Education Sector Reform Program	150	Morocco	Mar 20, 1986
Public Enterprise Rationalization Loan	240	Morocco	May 26, 1987
Agricultural Sector Adjustment Loan (02)	225	Morocco	Nov 24, 1987
Structural Adjustment Loan	200	Morocco	Dec 01, 1988
Financial Sector Development	235	Morocco	Jun 25, 1991
Structural Adjustment Loan (02)	275	Morocco	Apr 30, 1992
Financial Markets Development Loan	250	Morocco	Jul 27, 1995
Contractual Savings Development Loan	100	Morocco	Jun 09, 1998
Post Information Technology	101	Morocco	May 06, 1999
Policy Reform Support Loan (PRSL)	250	Morocco	Jun 01, 1999
Information Infrastructure Loan	65	Morocco	May 31, 2001
Asset Management Reform Loan	45	Morocco	Jun 05, 2003
Agricultural Sector Adjustment Loan	150	Tunisia	Sep 18, 1986
Industrial and Trade Policy Adjustment Loan	150	Tunisia	Feb 24, 1987
Structural Adjustment Loan	150	Tunisia	Jun 16, 1988
Agricultural Sector Adjustment Loan (02)	84	Tunisia	Jun 01, 1989
Public Enterprise Reform Loan	130	Tunisia	Jul 11, 1989
Economic and Financial Reforms Support Loan	250	Tunisia	Dec 12, 1991
Economic Competitiveness Adjustment Loan	75	Tunisia	Jul 25, 1996
Economic Competitiveness Adjustment Loan (02)	159	Tunisia	Apr 20, 1999
Economic Competitiveness Adjustment Loan (03)	252.5	Tunisia	Dec 20, 2001

Source: World Bank Project Database.
Note: Six cases are not reported here: Iran, 1957 SAL; Lebanon, 1977 SAL; Djibouti, 2001 SAL; Yemen, 1996, 97, 99 SAL.

APPENDIX C. VARIABLE DEFINITION AND DATA SOURCE

D(RES/GDP)	Changes in net reserves (BoP, current US$)/GDP(current US$)
CAB	Current account balance (% of GDP)
TDEBTS	Total debt service (% of exports of goods and services)
GDPG	GDP growth (annual %)
LGDPPC	Log[GDP per capita (constant 1995 US$)]
SDEBT	Short-term debt (% of total external debt)

(World Development Indicator 2002 CD-ROM)

DEM	Democracy index (1–7)

(Freedomhouse: www.freedomhouse.org)

DELEC	Dummy, is there a legislative election? (1 if yes)

(World Bank DPI database)

PEACE	Dummy, the year that a country under peace treaty with Israel (1 if yes)

Country list: Algeria, Djibouti, Egypt, Iran, Jordan, Libya, Morocco, Oman, Syrian, Tunisia, and Yemen
Years covered: 1975–2000