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THE IMPACT OF WAR AND TERRORISM
ON SOVEREIGN RISK IN MENA COUNTRIES

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The Impact of War and Terrorism on Sovereign Risk in MENA Countries

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Abstract

The prolonged war in Iraq, the political turmoil in Lebanon, the heightened tension between the Israelis and the Palestinians, and the specter of an attack on Iran have all significantly shaken business uncertainty levels in several MENA countries. Sovereign risk – the credit risk assessment concerned with the obligations of central governments – is believed to have increased. In response, credit rating agencies like Moody's and Standard and Poor's have revised their ratings or placed specific countries on their watch list, a move which normally precedes a credit rating change. Using data from Morgan Stanley, Freedom House and the World Bank, we quantify and explain the variability of sovereign risk in 5 MENA countries and two control countries on specific dates between 2002 and 2006, around which a tragic event has taken place. Our methodology allows us to test how the heightened political tension in the Middle East has altered the risk profiles of these countries, and provides an additional valuation tool to traditional agency ratings.

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Introduction

The prolonged war in Iraq, the political turmoil in Lebanon, the heightened tension between the Israelis and the Palestinians, and terrorists bombings in Casablanca and Sharm El Sheikh have altered the investment climate in several countries in Middle East and North Africa (MENA). Sectors such as tourism and foreign and capital investments have been mauled, hurting consequently the economies of several tourism-dependent countries like Egypt, Jordan, Lebanon and Morocco. Compounding the problem are the on-going specters of a Syrian-Israeli war, the Iranian nuclear challenge, and the recent civil strife in Gaza among others. All these events have cast dark shadows on the region's financial sectors, with aftershocks reverberating in their stock exchanges and the private sector carrying the brunt of these adverse effects. As a result, sovereign risk - the credit risk assessment concerned with the obligations of central governments – in several MENA countries rose significantly, causing a conspicuous increase in the cost and availability of capital for lending and investment.

Since 2001, a combination of a heightened political tension and record oil prices has influenced sovereign risk in the MENA region in two different directions. As MENA governments borrow on international bond markets, credit ratings by Standard and Poor's and Moody's have become significantly important. However, the history of credit agencies is fraught with disagreement and controversy over specific rating assignments – primarily due to the difficulty of assessing sovereign risk. With conflicting factors at play, two questions emerge: (1) How did the combination of political tensions and improved economies impact the MENA region as a whole and (2) To what extent did investors' risk assessments change, as evidenced in the sovereign risk premium they require?

Literature Review

The existing literature on sovereign risk is broad and well developed. Yet for the MENA region it is scant, consisting primarily of trade publications issued by major investment banks (Morgan Stanley, JP Morgan, Credit Suisse, etc...). For Latin America and Asia, however, the literature list is long (Boehmer and Meggison, 1990; Erb et. al., 1994; Hargis et al. 1998). By and large, these studies investigated whether the debt crises were exacerbated by the less developed countries' (LDCs) insolvency or market illiquidity. Ramcharran (1999) identified those sovereign credit ratings as the primary determinants of loan prices on the secondary market. However, an earlier study by Cantor and Packer (1996) showed that there was significantly more disagreement between rating agencies in their assessments of credit risk for low quality sovereigns than for similar quality US corporate credits. A more updated analysis was presented in a model by Ferrucci (2003) with the goal to assess whether sovereign risk was 'overpriced' or 'underpriced' during different periods of the 1990s. His results suggested that a debtor country's fundamentals and external liquidity conditions are important determinants of market spreads. However, a country's creditworthiness was found to be more broad-based than that provided by the set of economic fundamentals. In the context of MENA countries, Haddad and Hakim (2007) recently presented an econometric analysis based on a panel study of five countries (Egypt, Lebanon, Morocco, Saudi Arabia and Turkey). Their findings revealed that the temporal fluctuation in sovereign spreads is explained by changes in the current account, the assigned rating from the rating agencies, and per capita income.

Political events impact financial markets and the literature on sovereign debt showed a link between political risk and sovereign risk. Some studies distinguish between a country's ability-to-pay and a country's willingness-to-pay its debt. Repayments in arrears of sovereign

debt can hardly be enforced legally and the honoring of contractual obligations becomes a matter of cost-benefit analysis for governments. If the costs of repayment outweigh the benefits of repayment, the debtor country will interrupt its debt servicing. Kaminsky and Schmukler (1999) found that nearly one fifth of the largest stock price movements during the Asian crisis were associated with news of political nature. Zoli (2005) found that the Brazilian government announcements to raise the public sector surplus as well as concrete fiscal policy actions, such as budgetary cuts, implied a reduction in the perceived risk of default during the "confidence crisis" in 2002-03. Baig et al. (2006) extended the mentioned analysis and observes similar results for Poland but mixed results for Turkey. Bussiere and Mulder (2000) showed that political instability has a strong influence on economic instability for countries with weak economic fundamentals and low international reserves. Chang (2005) presented a theoretical structure that allows for the instantaneous determination of financial crises and political crises.

To summarize the preceding studies, it appears that since 1999 the literature has taken a slightly different tone in an attempt to investigate the role of internal politics and how they enter into the agency risk assessments, particularly when there is a perceived transition in government. Recent empirical studies on macroeconomic determinants of agency ratings by McNamara and Vaaler (2000), and Vaaler and McNamara (2004), and Block et al (2006) yielded results consistent with this view.

Our study elaborates on this literature in two directions: (1) we tie in a country's political events and debt indicator variables directly to the yield spread on its Eurobonds issues, and (2) we test whether, and by how much the political tensions since 2002 have created a shift in risk perception across selected MENA countries. These tests are critical for governments to evaluate how their sovereign risk is being priced in the international bond market, and if necessary, enable the concerned authorities to challenge any rating change by the agencies. At the same time, the results are also useful for investors (both private individuals and international bond funds) to better anticipate how sovereign spreads, and therefore a country's risk, correlate with specific economic and political events.

Proposed Data and Methodology

We estimate the determinants of sovereign risk in 5 MENA and 2 non-MENA countries in a panel setting using cross sectional and time series data on credit spreads derived from Eurobond issues. The methodology enables us to determine the evolution of sovereign risk over time and test whether a fundamental repricing of risk in specific MENA countries has occurred as a result of the following events:

1. the invasion of Iraq (March 2003)
2. the suicide bombings in Casablanca (May 2003)
3. the murder of Lebanese Prime Minister Rafiq Hariri (February 2005)
4. the attacks on Sharm el-Sheikh (July 2005)
5. the Israeli war on Lebanon (July 2006)

Two recent events in 2007 – namely the bombing in Algeria allegedly claimed by “Al Qaeda’s branch in Islamic North Africa” (April 2007), and the suicide bomb attack in Ankara (May 2007) – are worth investigating, however our economic data ends in December 2006 prior to these developments and prevent us from statistically testing their impact on sovereign yields.

Our analysis enables us to quantify the additional cost premium these MENA countries had to bear as a result of any shift in market perception from each of the five preceding events.

While there were other terrorists attacks in MENA countries since September 11 (for example Jordan and Saudi Arabia), these preceding events should capture the main shocks that have exacerbated the economic risks in each country. The model's explanatory variables consist of:

- a) The sovereign yield spread on Eurobonds from JP Morgan.
- b) Scores of political rights and civil liberties collected by Freedom House in Washington DC. We calculate the average of the two scores and use it as measure of freedom in each country.
- c) Monthly changes in a proxy for the stock market index of each country converted to US\$. The proxies are constructed by S&P/IFCG (Global) indices and represent the performance of the most active stocks in their respective emerging markets. As a core member of the S&P Emerging Market indices, the proxies are constructed from equities included in the Emerging Markets Database (EMDB) of S&P/IFCG. The data is also available through Bloomberg.
- d) Foreign bond rating available from Moody's and Standard and Poor's.
- e) And finally, a vector of country specific economic indicators collected by the World Bank.

The vector includes:

- Current account balance (as a percent of GDP). The current account records all inflows and outflows of income derived from exporting and importing goods and services, net income from investment and employee compensation, and unilateral transfers.
- Total debt service as a percent of Gross National Income.
- Total gross national income per capita, Atlas method (current US\$).
- External debt, total (current US\$) relative to total exports of goods and services.

The sample also includes 2 non-MENA countries (Brazil and South Africa) to allow for comparative analysis.

Because our data contains information on cross sectional units (countries) observed over time, a panel data estimation technique is adopted. This allows us to perform statistical analysis and apply inference techniques on either the time series or the cross-sectional dimension. The model takes the form:

$$SR_{it} = \alpha_i + \beta_{it}x_{it} + u_{it}.$$

where $i = 1, 2, \dots, N$ cross sections and periods and $t = 1, 2, \dots, T$; with $T = 60$ monthly periods (from January 2002 through December 2006) and $N = 7$ countries – 5 MENA countries, Egypt, Lebanon, Morocco, Tunisia, Turkey and 2 control countries –Brazil and South Africa). SR_{it} represents the sovereign risk premium for a US Treasury security of comparable maturity, and x_{it} is a vector of independent variables. Several dummy variables are used to test the statistical significance of the preceding 5 war and terrorism events, and contrast any change in sovereign risk in MENA vs. Brazil and South Africa. The elements of the dummy vector take the value 0 or 1 depending on whether the war or terrorist event has taken place. The dummy is set at 1 for two consecutive months: the month in which the event occurred and the following month. For the Iraq war, the elements of the dummy vector become 1 for all the months after March 2003 because, unlike a terrorist event, the conflict is on-going. We also provide a Wald test of the joint statistical significance of the 7 coefficients associated with each dummy variable to determine if the war/terrorism event had any impact beyond a single country or the MENA region.

Analysis of Empirical Results

Table 1 shows the descriptive statistics of our sample data and Figure 1 provides a plot of the sovereign spread during the study period. Table 2 shows a cross country comparison of the freedom variables across countries. Both South Africa and Brazil enjoy a higher freedom score than any of the MENA countries in our sample.

The panel study estimation results are summarized in Table 3. The current account and debt service variables are key factors. Both are signed correctly and are highly significant. A higher debt service (relative to GNI) especially increases the risk of default and therefore has a positive impact on the sovereign yield spread that a country has to pay on the Eurobond market. The current account variable, which increases with higher exports (net of imports), has the opposite effect on the yield differential for a country. These results are consistent for all countries. Similarly, the gross national income and the credit rating have the expected signs. A higher gross national income (per capita) suggests more relative prosperity for a specific country and consequently a better repayment ability. Likewise, a higher credit rating indicates a lesser likelihood of default. Both of these effects have a negative impact on the sovereign yield spread because they translate into a diminished sovereign risk premium. The equity market is also significant suggesting that the stock market index, perhaps more so than any other variable, closely tracks and drives the sovereign risk in a country. Specifically, a rising stock market index (in constant dollar terms) predicts higher earnings and a better economic outlook, all of which are expected to reduce the risk premium of a country on the international bond market. The total debt variable relative to exports is not statistically significant and it is not possible to evaluate its sign effectively.

Turning to the dummy variables, the war on Iraq seemed to have a selective impact on MENA countries. With the exception of Turkey, none of the countries we analyzed seemed to have been impacted by the invasion of Iraq. However, the effect on Turkey is not only highly statistically significant but is also economically pronounced. The magnitude of the dummy coefficient is positive and stands at 233 suggesting that the war on Iraq forced Turkey to pay marginally 233 basis points more on its Eurobonds borrowing that it would have had otherwise.

The “freedom” variables representing a country’s relative score in political rights and civil liberties worldwide are all highly significant. All the coefficients are positive indicating that restrictions on individual freedom (measured as an *increase* in the freedom score) widen the sovereign yield spread for a given country. Comparing the magnitude of the coefficient across the seven countries reveals that in MENA, Turkey stands to become the largest beneficiary of an improvement in freedom (measured by a 191 basis points (bp) interest savings, for each 1 point reduction in its freedom score), followed by Egypt (97 bp), Morocco (92 bp), Tunisia (88 bp), and Lebanon (86 bp). It is important to understand that these figures only represent the impact of a *change* in a country’s freedom index on its sovereign yield spreads and not that country’s *level* of freedom on sovereign yields. For example, Tunisia is ranked 5.5 (on a scale of 1 through 7) according to Freedom House. In contrast, Turkey has a score of 3. Our results indicate that for an identical 1 point improvement in freedom, the sovereign spreads in Turkey would fall by 191 bp, more than twice than their fall in Tunisia (88 bp). For the 5 MENA countries, the average impact is 111 bp. It is beyond the scope of this paper to analyze the specific reasons why the financial impact of political rights and civil liberties varies so markedly across MENA countries but it would appear that the higher a country’s score, the smaller the marginal impact on sovereign spreads. Indeed, South Africa and Brazil, two countries in our sample with scores lower than Turkey could reap the most financial benefit from a further improvement in their freedom scores.

By and large, the dummy variables relevant to terrorist events in MENA are all insignificant. It appears that the world bond market has shrugged off these events and the yield spreads have acquired a sort of immunity against similar events in a country caught as a victim of such tragedies. The Lebanese and Moroccan Eurobonds do not seem impacted by the terrorist bombing in Casablanca (May 2003), the murder of Lebanese Prime Minister Rafiq Hariri (February 2005) or Israel's declared war on Lebanon (July 2006). For a reason we cannot explain, the spread on Egypt's Eurobonds has actually improved following the attack on Sharm el Sheikh in July 2005. It would appear that the Eurobond market has experienced an event unrelated to the variables in our model.

To better evaluate the *collective* impact of the dummy variables, we conducted a Wald test of the joint significance of the dummy variables. Specifically, our null hypothesis is:

H_0 : the country dummy vectors relevant to war and terrorism = 0 against the alternative:

H_1 : the relevant dummy vectors are $\neq 0$.

The results of this F tests are provided in Table 4 and indicate that H_0 is only statistically rejected in the context of the coefficients of the dummy vector for the Iraq war and the bombing in Casablanca¹. Taken collectively, the results of the joint test of the dummy vectors indicate that the Iraq war has indeed produced a fundamental shift in risk perception in MENA and beyond. While the impact on sovereign spreads for each individual country was not felt directly, the joint impact on the MENA region is statistically significant and in the case of Turkey, the effect was both large in magnitude and statistically significant.

Conclusion and Policy Recommendations:

Sovereign risk ratings published by agencies facilitate credit transactions for developing country borrowers by publishing letter-grade ratings. Those ratings are commonly relied on by capital market participants to assess both the specific capability and willingness of governments to honor their debts, and the more general risks associated with lending and investment in the locale. While the agency ratings are significant, our study has demonstrated that the sovereign yield spreads, a direct measure of a country's sovereign risk, are far more complex and vary with many factors, beyond what a simple credit rating can possibly capture. Specifically, the current account, the debt service, the level of national income and the change in the stock market index are equally valid drivers for a country's risk rating. These simple factors should therefore be incorporated in assessing a country's risk profile alongside the country's credit rating offered by Standard and Poor's or Moody's.

Perhaps more telling is a country's freedom score and its impact on sovereign yield spreads. Our results suggest that the average impact of a 1 point improvement in the region's freedom index translates into a 111 basis points savings on its cost of borrowing on the international bond markets. With the debt servicing for the 5 MENA countries averaging \$44 billion annually (from Table 1), an improvement in political rights and civil liberties could generate substantial interest savings and provide a major boom to strained fiscal budgets.

Another important result of the paper is the extent to which war and terrorism has produced an impact on the region's financial markets. It would appear that with the exception of Turkey, the region has been relatively unscathed from these tragic events. We find evidence that the region's Eurobond markets have become somewhat immune to war and terrorism and the sovereign spread (or risk premium) on most MENA countries under study, remained constant after a major war or terrorist incident in the Middle East. Consequently, MENA

¹ These two events are only a few months apart and it is possible that the latter effect is picking up a residual statistical noise from the dummy vector of the Iraq war.

countries need not be too concerned if they maintained their level of sovereign risk exposure ahead of any expected war or major political event. This is contrary to the widespread perception among market participants that a war or a terrorist incident may lead to the arbitrage between sovereign spreads of various countries.

As noted earlier, Turkey was a major exception to this conclusion. At the eve of the Iraq war launch, Turkey's external debt stood at \$145 billion with a debt service of \$28 billion, representing 19% of its total external debts (from Table 1). Our results show the impact of the war alone raised Turkey's cost of borrowing by 233 basis points. This factor translates into an additional \$65 million Turkey has had to annually pay on the world bond markets to meet its borrowing needs. Clearly the impact of the Iraq war has not been uniform across the MENA region.

Developing countries seek to finance their growth strategies by attracting mobile investment capital in a global economy. In this effort, the sovereign ratings are of central concern to policymakers who recognize the importance of the divergent interests of foreign investors and host states, and the resulting risks they perceive over time. However, the ratings do not provide a complete picture and should therefore be used as one of several factors in assessing the perceived risks in a given country. Our results are expected to help policymakers in MENA countries (1) better understand how financial markets are pricing their Eurobonds, (2) clearly identify the specific risk bins which influence their credit spreads, and (3) implement mitigation techniques to reduce their sovereign risk.

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Figure 1:

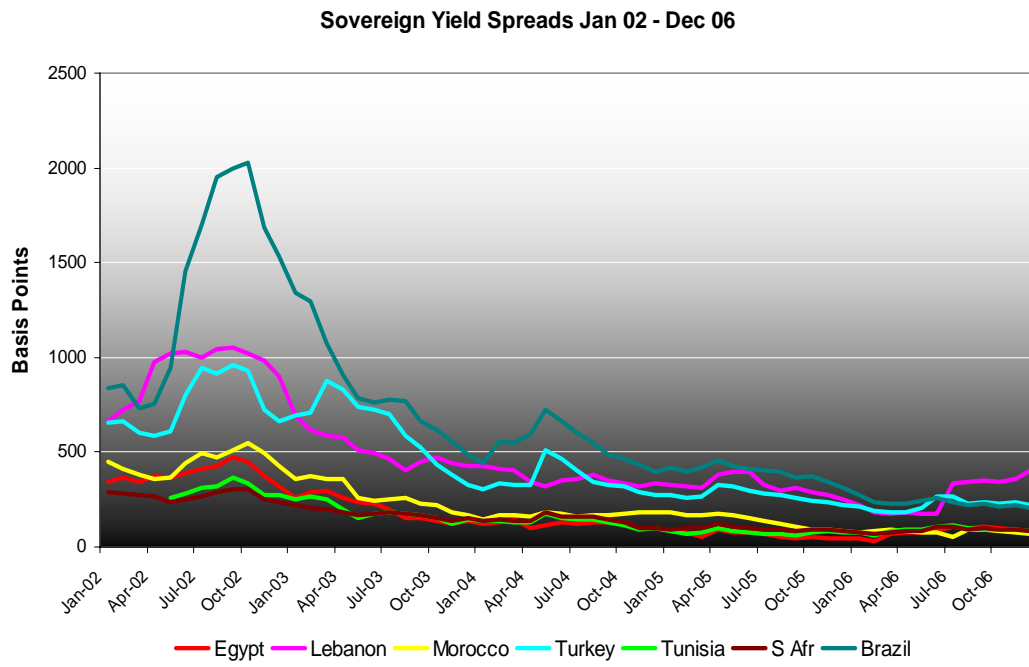


Table 1: Descriptive Statistics by Country Jan 2002 – Dec 2006

		Mean	Median	Maximum	Minimum	Std. Dev.	Obs.
Current Account (% of GDP)	Brazil	0.656	1.183	1.768	-1.510	1.322	48
	Egypt	3.135	3.429	4.974	0.708	1.735	48
	Lebanon	-19.154	-21.318	-8.741	-25.239	6.467	48
	Morocco	2.948	2.880	4.092	1.938	0.932	48
	S Afr	-2.748	-3.236	0.797	-6.383	2.456	60
	Turkey	-3.925	-4.249	-0.829	-6.372	2.109	48
	Tunisia	-2.370	-2.440	-1.056	-3.542	0.955	48
External Debt (DOD, Current US\$)	Brazil	220	226	237	188	19	48
	Egypt	31	31	34	30	2	48
	Lebanon	20	20	22	17	2	48
	Morocco	18	18	19	17	1	48
	S Afr	28	28	31	25	2	48
	Turkey	152	154	171	131	16	48
	Tunisia	18	18	20	15	2	48
Debt Service (Current US\$ Billion)	Brazil	57	56	63	53	4	48
	Egypt	2	2	3	2	0	48
	Lebanon	3	3	4	2	1	48
	Morocco	3	3	4	3	1	48
	S Afr	4	5	5	4	0	48
	Turkey	33	31	42	28	6	48
	Tunisia	2	2	2	1	0	48
Debt Serv. / GNI (% of GNI)	Brazil	9.38	9.53	11.05	7.42	1.57	48
	Egypt	2.86	2.89	3.33	2.34	0.36	48
	Lebanon	16.69	17.01	20.71	12.04	3.11	48
	Morocco	7.96	8.03	10.49	5.30	2.32	48
	S Afr	2.70	2.34	4.34	1.80	1.01	48
	Turkey	12.42	11.71	15.14	11.11	1.61	48
	Tunisia	7.39	7.53	7.75	6.76	0.39	48
Stock Market Index (% change)	Brazil	2.9%	3.1%	27.3%	-29.5%	11.0%	60
	Egypt	4.5%	3.9%	45.4%	-17.2%	10.4%	60
	Lebanon	2.5%	0.7%	45.3%	-21.7%	10.8%	60
	Morocco	2.0%	1.0%	23.6%	-14.3%	6.0%	60
	S Afr	2.7%	3.8%	14.6%	-14.6%	6.9%	60
	Turkey	2.5%	5.5%	38.8%	-27.5%	13.3%	60
	Tunisia	1.2%	0.2%	13.7%	-6.1%	3.7%	60
GDP (Current US\$ Billion)	Brazil	735	664	1,070	506	214	60
	Egypt	89	88	107	79	10	60
	Lebanon	21	22	23	19	1	60
	Morocco	48	50	57	36	7	60
	S Afr	198	216	255	111	53	60
	Turkey	299	303	403	184	80	60
	Tunisia	27	28	30	21	3	60
GNI (Per capita, Atlas Method Current US\$)	Brazil	3592	3320	4730	2960	660	60
	Egypt	1312	1310	1400	1250	59	60
	Lebanon	5178	5490	5550	4510	431	60
	Morocco	1550	1570	1900	1190	262	60
	S Afr	3870	3630	5390	2640	1085	60
	Turkey	3848	3780	5400	2510	1115	60
	Tunisia	2552	2650	2970	2000	372	60
Sovereign Spread (in bp)	Brazil	675	517	2027	204	479	60
	Egypt	171	124	474	30	125	60
	Lebanon	480	391	1052	173	256	60
	Morocco	221	172	548	53	137	60
	S Afr	155	140	307	70	70	60
	Turkey	446	328	963	182	235	60
	Tunisia	148	126	367	61	81	56
Exports (% of GDP)	Brazil	15.1	15.0	16.4	14.1	0.8	60
	Egypt	26.0	28.2	31.3	18.3	5.1	60
	Lebanon	18.0	18.0	19.7	16.3	1.5	48
	Morocco	35.8	33.8	48.8	32.5	4.3	60
	S Afr	28.6	27.8	32.7	26.3	2.3	60
	Turkey	28.2	28.0	29.2	27.4	0.8	60
	Tunisia	47.7	46.9	54.4	43.8	3.7	60

Source: Bloomberg and World Bank, WDI database, 2007.

Sovereign Ratings From Moody's						
Country	2001	2002	2003	2004	2005	2006
Egypt	Baa1	Baa1	Baa1	Baa1	Baa1	Baa3
Lebanon	B1	B2	B2	B2	B2	B3
Morocco	Ba1	Ba1	Ba1	Ba1	Ba1	Ba1
Tunisia	Baa3	Baa3	Baa3	Baa2	Baa2	Baa2
Turkey	B1	B1	B1	B1	B1	Ba3
Brazil	B1	B1	B2	B2	Ba3	Ba3
South Africa	Baa1	A2	A2	A2	A2	A2

Source: Moody's 2007

Table 2: Political Rights and Civil Liberties Across Selected MENA countries

Year		Egypt	Lebanon	Morocco	Tunisia	Turkey	Brazil	South Africa
2002	PR	6	6	5	6	3	2	1
	CL	6	5	5	5	4	3	2
	Avg	6	5.5	5	5.5	3.5	2.5	1.5
2003	PR	6	6	5	6	3	2	1
	CL	6	5	5	5	4	3	2
	Avg	6	5.5	5	5.5	3.5	2.5	1.5
2004	PR	6	6	5	6	3	2	1
	CL	5	5	4	5	3	3	2
	Avg	5.5	5.5	4.5	5.5	3	2.5	1.5
2005	PR	6	5	5	6	3	2	1
	CL	5	4	4	5	3	2	2
	Avg	5.5	4.5	4.5	5.5	3	2	1.5
2006	PR	6	5	5	6	3	2	2
	CL	5	4	4	5	3	2	2
	Avg	5.5	4.5	4.5	5.5	3	2	2

PR = Political Rights, CL = Civil Liberties. Avg = the average of the 2 scores. The freedom. scores range between 1 (the most free) and 7 (the least free). *Source: Freedom House, Washington DC.*

Table 3: Wald Tests for the Joint Significance of the Coefficients for the War and Terrorism Dummies Across Countries: Time Period: Jan 2002 - Dec 2006

Variable	Coefficient	Std. Error	t-Statistic
Const**	385.550	101.223	3.809
Current Account (% of GDP)**	-20.617	2.551	-8.081
Debt Service (% of GNI)**	6.841	2.658	2.573
Debt / Exports	-1.83E-20	1.55E-20	-1.186
Gross Nat Income (GNI)**	-0.137	0.009	-14.776
Stock Mkt Index (monthly % ch)*	-55.645	31.570	-1.763
Credit Rating**	-59.214	6.962	-8.505
Freedom Dummies:			
Brazil**	481.109	64.301	7.482
Egypt**	97.416	19.643	4.959
Lebanon**	85.943	24.681	3.482
Morocco**	91.826	22.901	4.010
S Afr **	575.490	79.892	7.203
Turkey**	191.267	32.295	5.922
Tunisia**	87.888	21.150	4.156
Iraq War Dummies:			
Brazil	33.253	262.570	0.127
Egypt	95.387	84.650	1.127
Lebanon	-129.913	140.693	-0.923
Morocco	59.996	66.552	0.901
S Afr	-56.212	42.696	-1.317
Turkey**	233.409	86.045	2.713
Tunisia	7.124	22.052	0.323
Egyptian Terrorism Dummies:			
Brazil	10.347	267.362	0.039
Egypt**	-244.825	84.786	-2.888
Lebanon	57.952	142.406	0.407
Morocco	-60.607	66.619	-0.910
S Afr *	71.643	43.871	1.633
Turkey	-16.310	87.299	-0.187
Tunisia	-7.014	22.635	-0.310
Lebanese War & Terrorism Dummies:			
Brazil	14.389	267.366	0.054
Egypt	-118.027	84.560	-1.396
Lebanon	91.217	142.031	0.642
Morocco	-26.980	66.614	-0.405
S Afr *	74.907	43.883	1.707
Turkey	-37.927	87.335	-0.434
Tunisia	0.216	22.639	0.010
Moroccan Terrorism Dummies:			
Brazil	-189.721	262.529	-0.723
Egypt	49.337	84.649	0.583
Lebanon	-204.995	140.704	-1.457
Morocco	-43.874	66.565	-0.659
S Afr *	-69.443	42.668	-1.628
Turkey	112.051	86.045	1.302
Tunisia	-29.954	22.090	-1.356
Adj R-squared	65.98%	<i>Durbin-Watson</i> <i>stat</i>	0.19
* Significant at 10%			** Significant at 1%

Table 4: Wald Tests for the Joint Significance of the Coefficients for the War and Terrorism Dummies Across Countries: Time Period: Jan 2002 - Dec 2006

Joint Significance of the country dummies relevant to	War in Iraq	Egyptian Terrorism	Moroccan Terrorism	War & Terrorism In Lebanon Feb 05 & Jul 06
Events Date:	Mar-03	Jul-05	May-03	06
F-statistic	5.45	1.55	1.56	3.87
<i>p-value</i>	<i>0.000023</i>	<i>0.152</i>	<i>0.147</i>	<i>0.00048</i>
Chi-square	32.68	10.82	10.92	27.07
<i>p-value</i>	<i>0.000012</i>	<i>0.147</i>	<i>0.142</i>	<i>0.00032</i>