ECONOMIC FREEDOM OF THE ARAB WORLD

(REPORT & INDEX – 2006-07)

THE FRASER INSTITUTE

INTERNATIONAL RESEARCH FOUNDATION

THE FRASER INSTITUTE

ACKNOWLEDGMENTS

The authors would like to acknowledge the contribution of Michael Walker, President of The Fraser Institute Foundation, James Gwartney of Florida State University and Robert Lawson of Capital University for their invaluable ideas and assistance.

Supported by a grant from the John Templeton Foundation, and from the Centre of International Private Enterprise.

Disclaimer

The opinions expressed in this report are those of the authors and do not necessarily reflect the views of the John Templeton Foundation, or of the supporters, staff, or trustees of The Fraser Institute.

ECONOMIC FREEDOM OF THE ARAB WORLD

Salem Ben Nasser Al Ismaily, Amela Karabegović and Fred McMahon[1]

This is the third report on economic freedom in the Arab World. The first was published by the same authors in the *Arab World Competitiveness Report 2005* (Lopez-Claros and Schwab, 2005). The second edition was published by the International Research Foundation (IRF) of Oman and The Fraser Institute as is this edition. This edition adds a new year of data, 2004, the most recent year for which data are available. *Economic Freedom of the Arab World* is modeled on the annual reports in the series, *Economic Freedom of the World* (Gwartney and Lawson, various years)[2].

The classical definition of economic freedom is:

> *Individuals have economic freedom when (a) property they acquire without the use of force, fraud, or theft is protected from physical invasions by others and (b) they are free to use, exchange, or give their property as long as their actions do not violate the identical rights of others. Thus, an index of economic freedom should measure the extent to which rightly acquired property is protected and individuals are engaged in voluntary transactions (Gwartney, Lawson, and Block, 1996: 12).*

The mechanics of economic freedom are easy to understand. Any transaction freely entered into must benefit both parties. Any transaction that does not benefit both parties would be rejected by the party that would come up short. This has consequences throughout the economy. Consumers who are free to choose will only be attracted by superior quality and price. A producer must constantly improve the price and quality of existing products or invent new products. Without this, customers will not freely enter into transactions with the producer. Many billions of mutually beneficial transactions occur every day, powering the dynamic that spurs increased productivity and wealth throughout the economy.

Regional Economic Background

The year 2005 has seen a marked improvement in the economic development of the Arab World. The region has recorded positive growth benefiting from very strong global commodity prices, including those for oil. All the oil-exporting countries have posted a very strong growth and the real GDP growth rates in the range of 5% to 6% appear likely to continue at least through 2007 (El'Naggar, 2006). The non-oil-exporting economies in the region are also growing strongly this year and may reasonably be expected to continue with similar performance in 2007. However, countries such as Somalia and the Sudan are over shadowed by conflict and the threat of economic embargos despite the huge prospects for economic growth.

The Gulf countries have seen the highest economic growth thanks to the high revenues from oil exports but are concerned about the possiblity of sanctions being imposed on Iran as a result of its continued nuclear development program. Needless to say, if sanctions were to be imposed on Iran, which is an important economic partner of the Gulf countries, economic growth in the region would be somewhat slowed.

The economic growth in Lebanon, on the other hand, was disrupted by the Israeli invasion and destruction of basic infrastructure. In Iraq, escalating sectarian violence is undoubtedly an important impediment to more rapid recovery.

Global changes have shifted the economic strength and attractiveness to investors steadily from one region to another. Currently, the radar screens of international investors are firmly fixed on China and India, with an occasional glance at Brazil. The relationships among countries and blocs are now changing more dynamically. Efforts made at the Doha round of the WTO's trade talks towards ensuring more equal opportunities for all to participate in global economy has not progressed as much as had been hoped.

The Arab world is unfortunately still struggling in its efforts to appear on the radar screen of international investors. Countries that have achieved some success in promoting foreign investment in the Arab world are those that have managed to cooperate among themselves and to increase economic freedom. A notable economic group in the Arab World is the Gulf Cooperative Council (GCC). The GCC countries - Kuwait, Saudi Arabia, Bahrain, Qatar, Oman and the UAE - have adapted to the challenges of facing competition effectively and have emerged as a strong and prosperous block. With high energy demand the world over, the era of cheap oil seems to be over, at least in foreseeable medium term. This has enabled all GCC countries to generate considerable fiscal surpluses, improve balance of payments drastically, and make the GCC the fastest growing bloc in terms of GDP.

Per-capita income of GCC countries is amongst the highest in the world today. But, more importantly, the long-term vision of the region is to develop policy initiatives to diversify the economy and bring down oil revenue as a proportion of economic activity. This vision is a key reason why the Gulf States have been relatively successful in expanding economic freedom. Showing an increasing degree of openness in its policies on investment, trade, and commerce, a rapid pace of modernization and infrastructure development, and an enlarged role for the private sector, the GCC's economic transformation has been a model. The GCC in general has the highest level of economic freedom in the Arab world. On the social front, all important indicators such as health care, literacy, and participation by women in governance show steady improvement and suggest a significant transformation.

The potential of the Arab world to cooperate economically is high, but there are challenges. The Arab world is a large block, 22 countries having common culture, tradition, and language. However, there are visible gaps in terms of political climate, economic climate, and wealth. While the GCC countries have made many reforms and changes in policy that have helped attract investment, much needs to be done at the regional level.

The Arab region spans 6,000 kilometers on two continents. For reasons such as the lack of physical proximity to one another and the lack of specialization to manufacture complementary products, trade among Arab countries is fairly low, as only 10% of Arab trade is done within the region (Arab Banking Corporation, 2006). Even within the Arab region, trade is more concentrated at sub-regional level and not well dispersed. For example, the GCC has 75% of its intra-Arab trade with fellow GCC members, and the Arab Maghreb region conducts 65% of its trade within the region (Arab Banking Corporation, 2006).

On global Foreign Direct Investment (FDI) front, the Arab region attracts only 10% of total Arab FDI, a situation that needs greatly to be improved. Also, the Arab share of global Foreign Direct Investment has been insignificant, less than 1.5% despite huge natural resources and manpower (Economist Intelligence Unit, 2006). Only the prospering GCC economies are seeing an upward trend in investment, subsequent to opening up. Arab nations on average have only a third of the FDI that a developing economy of similar size would have, based on global averages. A deficit of globally competitive human capital, large pockets of illiteracy, the "brain drain," poverty, failure to embrace communication technology, and low investment in R&D are some of the factors the impede the flow of investment into the region.

While some countries have opened up important sectors such as capital markets, real estate, and education, most of the countries have been slow to pursue policy improvements and increase economic freedom. Unless the struggling economies make an attempt to align with the global framework and facilitate free movement of all forms of resources, investment will not flow easily.

Banks and investment houses have an important role to play in increasing financial cooperation. They must cooperate to fight financial crimes, channel investments across the region prudently, and develop syndicate financing integrated with trade and commerce. There is considerable scope for improving cross-border project financing. Across the region, free movement of goods and funds, "free zones" to attract global entrepreneurs, improvements in efficiency, and the single-window regulatory structure, among other policy improvements, would go a long way towards attracting investments.

As has been seen the world over, restrictive policies and a favorable climate for investment do not go together. Arab nations must make globalization work to our advantage by creating a liberal environment and increasing attractiveness for investors across the region. In other words, economic freedom must be spread across the region.

THE INDEX OF ECONOMIC FREEDOM IN THE ARAB WORLD

An overview of the rankings

Economic freedom has been shown in top-level, peer-reviewed research to promote growth and other positive outcomes (see Appendix A). It is also highly consistent with Arab and Muslim culture and tradition. For much of the past millennium, it is likely that the Muslim world has enjoyed the greatest level of economic freedom, in general, and trade openness, in particular, in the world. It is only over the past few centuries that this lead has slipped away.

Economic Freedom of the Arab World is only three years old. The most recent data available are from 2004, so this report will not capture recent developments in the region. Over the three years during which the annual report has been published, economic freedom in the region has, by and large, held steady. This is not surprising. Changes in economic freedom come slowly as policies and attitudes change and develop. As *Economic Freedom of the Arab World* evolves, it will provide a key insight on where progress is being made and, because of the extensive descriptive capacity of its

39 components, it will provide a detailed prescription indicating where policy improvements are required.

The index published in *Economic Freedom of the Arab World* is compiled only from third-party data: in order to ensure objectivity, neither of the sponsoring institutions provides any original data. As well, the formulas used in the calculations have remained the same for each year of the report. Thus, the authors of the report are unable to influence the standings of the nations in the report. Moreover, any outside observer would be able to replicate the index in full, producing identical results.

On average, the Gulf states have achieved the highest level of economic freedom in the Arab world (table 1). This is actually not made easier by oil wealth, which presents a great temptation to overspend and crowd out private-sector economic activity, or even to weaken free markets so that economic power remains concentrated in the hands of those who control the oil revenues. Because of the oil wealth, governments have the means to protect their positions, even if economic activity outside the oil sector is weak. Despite this, the Gulf States have worked to open their economies internally and externally to world trade.

Of the two top performers in the three years of the index, however, only one is from the Gulf region. In the first two years of data, Oman and Lebanon tied for top spot. This year, Oman pulled slightly ahead and Lebanon fell to third spot. However, it must be stressed that the scores of the top three nations remain very close. Only future reports will reveal whether changes this year are part of a long-term trend or whether it is due to year-to-year variability in the data.

Two other nations have traditionally done well in the report, Kuwait, in second place this year, and the United Arab Emirates, tied with Lebanon for third this year. In each year of the report, these nations have been in the top four, though this year Jordan came close to closing the gap with the top four.

The structure of the report

The index published in *Economic Freedom of the World* uses 38 components in five areas. Because underlying data for some of the components used in the world index were not broadly available for the Arab world, they were replaced by similar components with broader coverage of the Arab world. The index published in *Economic Freedom of the Arab World*, therefore, includes the same five areas as *Economic Freedom of the World* but has 39 components. The score for each of the five areas is derived by averaging the components within that area[3].

The overall rating was computed by averaging the scores of the five areas. Each component was normalized on a scale of zero to 10 through the formula $(V_{max} - V_i) / (V_{max} - V_{min}) \times 10)$. Appendix B describes the procedures by which scores of between zero and 10 were derived for each component . Details on sources and construction can also be found in Appendix B.

The minimums and maximums are taken from *Economic Freedom of the World* (EFW), which includes 130 nations. For those components not in the EFW report, minimums and maximums were derived from the 130 countries included in the report. Global rather than regional minimums and maximums were used because of the small variability in some of the components among

Arab countries and in order to place the Arab nations in a broader context. Thus, a high score indicates that a nation is doing well, not only in comparison with its immediate regional neighbours, but also in comparison with best-practice nations around the world.

The index published in *Economic Freedom of the Arab World* includes the 22 nations of the League of Arab States. Ten of these nations also appear in *Economic Freedom of the World* and the relative rankings of these nations in both indexes are very similar, despite the slightly different menu of components used in the index published in *Economic Freedom of the Arab World*. An overall score was computed for 12 of the nations included in *Economic Freedom of the Arab World*; an overall score could not be computed for the remaining 10 due to a lack of data.

Following is a description of the variables used to measure economic freedom, explanations of why they are relevant, and the scores of Arab nations where data are available[4].

Area 1: Size of Government: Expenditures, Taxes and Enterprises

The four components of Area 1 indicate the extent to which countries rely on individual choice and markets rather than the political process to allocate resources and goods and services. When government spending increases relative to spending by individuals, households, and businesses, government decision-making is substituted for personal choice and thus economic freedom is reduced. The first two components address this issue: Government consumption as a share of total consumption (1A) and Transfers and subsidies as a share of GDP (1B). The third component (1C) measures the extent to which countries use private enterprise and markets rather than government enterprises to produce goods and services. The fourth component (1D) is based on the top marginal income-tax rate and the income threshold at which it applies. High marginal tax rates that apply at relatively low income levels increasingly deny individuals the fruits of their labor.

Table 2 shows the results for Area 1, Size of Government. The oil states generally seem to be in the middle of the rankings in this area. Although their spending is relatively high, they typically feature relatively low rates of taxation. Lebanon is by far the best performer. Unfortunately, several states have overly large government sectors, which will stifle entrepreneurial activity by creating state burden that is too heavy.

Area 2: Commercial and Economic Law and Security of Property Rights

Protection of persons and their rightfully acquired property is a central element of both economic freedom and a civil society. Indeed, it is the most important function of government. Security of property rights, protected by the rule of law, is essential to economic freedom. Freedom to exchange, for example, is meaningless if individuals do not have secure rights to property, including the fruits of their labor. Failure of a country's legal system to provide for the security of property rights, enforcement of contracts, and the mutually agreeable settlement of disputes will undermine the operation of a market-exchange system. The first two components in this area – 2A, Military interference in the rule of law and the political process and 2B, Integrity of the legal system – provide measures of whether or not the rule of law is applied impartially and consistently. Variable 2C, Registering property, provides information on how easy it is to establish property rights and 2D, Enforcing contracts, indicates whether agreements freely entered into are effectively protected by the rule of law. Both 2C and 2D are composites of other sub-components that measure the number of procedures, delays in judgments, and costs. Procedures that are too numerous, time consuming or costly, lead to deterioration of the legal system's ability to protect freely made agreements.

Table 3 shows the results for this area. Some Arab states such as Saudi Arabia, Oman, Tunisia, United Arab Emirates, Kuwait and Mauritania do relatively well in the rule of law.

Area 3: Access to Sound Money

Money is essential to exchange. An absence of sound money undermines gains from trade and erodes the value of property held in monetary instruments. Sound money is essential to protect property rights and, thus, economic freedom. When governments print money to finance their expenditures, in effect, they are expropriating the property and violating the economic freedom of their citizens. This (measured in variable 3A) leads to inflation. High and volatile rates of inflation (variables 3B and 3C) distort relative prices, alter the fundamental terms of long-term contracts, and make it virtually impossible for individuals and businesses to plan sensibly for the future. Component 3D is designed to measure the ease with which other currencies can be used via domestic and foreign bank account: that is, can one freely exchange and obtain differing currencies.

Table 4 shows the results for this area. Many Arab states, especially the GCC, have among the best records in the world for Sound Money. Average scores in this area are typically higher than in other areas, though Algeria, Comoros, Libya, Morocco, Sudan, and Tunisia could improve their policy.

Area 4: Freedom to Trade Internationally

In our modern world of high technology and low costs for communication and transportation, freedom of exchange across national boundaries is a key ingredient of economic freedom. The components in this area are designed to measure a wide variety of restraints that affect international exchange: these include tariffs (4A and its subcomponents), exchange rate distortions (4B), and exchange rate and capital controls (4C).

The oil states and, to a lesser extent, Jordan have successfully opened themselves to the world (Table 5). However, the remaining states could increase the prosperity of their citizens by further opening to trade. The uneven performance in this area is one of the reasons that Arab states have achieved only limited trade integration.

Area 5: Regulation of Credit, Labor and Business

When regulations restrict entry into markets and interfere with the freedom to engage in voluntary exchange, they reduce economic freedom. Regulatory restraints that limit the freedom of exchange in credit, labor, and product markets are included in the index. The first component (5A) reflects conditions in the domestic credit market. The components are designed to measure whether government allows free markets to determine credit or whether this is politically determined and whether credit is available in a timely, cost-efficient manner to credit-worthy individuals and businesses that freely seek it. Many types of labor-market regulations (5B) infringe on the economic freedom of employees and employers. The more prominent of those measured in this index are difficulty in hiring, rigidity in hours, dismissal regulations and costs, and conscription. Like the regulation of the credit markets and labor markets, the regulation of business activities (5C) inhibits economic freedom. The regulation-of-business components are designed to identify the extent to which regulatory restraints and bureaucratic procedures limit establishing a business (5Ci) and closing it (5Cii).

Red tape can strangle new businesses and job creation. The Gulf states have typically managed to reduce red tape although many of the other states, with the exception of Comoros and Jordan, still have overly heavy regulatory burdens (table 6).

Conclusion

The Arab world has considerable diversity in economic freedom, with some nations having high levels of economic freedom and others relatively low levels. Unfortunately, those nations with low levels deprive their citizens of the well-known benefits of economic freedom. This also limits the ability of the region to develop strong economic interconnections and trade links.

---

[1]*We would like to thank Salem Al Ismaily for inspiring and spear-heading this work. To avoid a conflict of interest with his promotion of investment in Oman, he excused himself from calculating the index but undertook the bulk of the analysis.*

[2]*In 1984, Michael Walker, who was then Executive Director of The Fraser Institute, in conjunction with Milton and Rose Friedman, started the Economic Freedom project to enhance understanding of the connection between it and political and civil freedoms, and their collective role in influencing economic performance. The research phase of the project involved about 60 of the world's top scholars including several Nobel Laureates. The economic freedom network now has member institutes in 72 nations, most recently Oman.*

[3]*The five areas are being used as the basis for the Arab Economic Freedom Awards. For example, the Lean Government award is based on the results in Area 1: Size of Government: Expenditures, Taxes and Enterprises.*

[4]*This description closely follows Gwartney and Lawson, 2006: 10–12.*

REFERENCES

Ayal, E.B., and K. Georgios (1998). "Components of Economic Freedom and Growth: An Empirical Study." *Journal of Developing Areas* 32 (Spring): 327-38.

Al Ismaily, Salem Ben Nasser, Amela Karabegović, and Fred McMahon (2005). "Economic Freedom of the Arab World." In Augusto Lopez-Claros and Klaus Schwab, *The Arab World Competitiveness Report 2005 (Geneva: World Economic Forum, 2005)*: 129-141.

Arab Banking Corporation (2006). *Public BSH-ABC*. Available online at http://www.arabbanking.com.

Bengoa, M., and B. Sanchez-Robles (2003). "Foreign Direct Investment, Economic Freedom and Growth: New Evidence from Latin America." *European Journal of Political Economy* 19, 3 (September): 529-45.

Berggren, Niclas (2003). "The Benefits of Economic Freedom: A Survey." *The Independent Review* 8, 2 (Fall): 193-211.

Carlsson, F., and S. Lundstrom (2002). "Economic Freedom and Growth: Decomposing the Effects." *Public Choice* 112, 3/4 (September): 335-44.

Dawson, J.W. (1998). "Institutions, Investment, and Growth: New Cross-Country and Panel Data Evidence." *Economic Inquiry* 36 (October): 603-19.

Dawson, J.W. (2003). "Causality in the Freedom-Growth Relationship." *European Journal of Political Economy* 19, 3 (September): 479-95.

De Haan, J., and J-E. Sturm (2000). "On the Relationship between Economic Freedom and Economic Growth." *European Journal of Political Economy* 16: 215-41.

De Haan, Jakob, and C.L.J. Sierman (1998). "Further Evidence on the Relationship between Economic Freedom and Economic Growth." *Public Choice* 95: 363-80.

Doucouliagos, Chris, and Mehmet Ali Ulubasoglu (2006). "Economic Freedom and Economic Growth: Does Specification Make a Difference?" *European Journal of Political Economy* 22, 1: 60-81.

Easton, S.T., and M.A. Walker (1997). "Income, Growth, and Economic Freedom." *American Economic Review* 87, 2 (May): 328-32.

Economist Intelligence Unit (2006). Available online at http://www.economistgroup.com.

EconStats Database (2005). Available online at http://www.econstats.com/home.htm (as of September, 2005).

El'Naggar, Dina (2006). World Bank Report (September). Washington, DC: The World Bank.

Ernst & Young (2003). *Ernst & Young in the Middle East*. Compiled and published by Ernst & Young offices throughout the region.

Griswold, D.T. (2004). "Trading Tyranny for Freedom: How Open Markets Till the Soil for Democracy." *Trade Policy Analysis* 26 (January). Washington, DC: Cato Institute.

Gwartney, James, Robert Lawson, and Walter Block (1996). *Economic Freedom of the World: 1975-1995.* Vancouver, BC: The Fraser Institute.

Gwartney, James, and Robert Lawson (2004). *Economic Freedom of the World: 2004 Annual Report*. Vancouver, BC: The Fraser Institute. Available online at www.freetheworld.com.

Gwartney, James, and Robert Lawson, with Erik Gartzke (2005). *Economic Freedom of the World: 2005 Annual Report*. Vancouver, BC: The Fraser Institute. Available online at www.freetheworld.com.

Gwartney, James, and Robert Lawson, with William Easterly (2006). *Economic Freedom of the World: 2006 Annual Report*. Vancouver, BC: The Fraser Institute. Available online at www.freetheworld.com.

International Monetary Fund (2004a). *Annual Report on Exchange Arrangements and Exchange Restrictions.* Washington, DC: IMF.

International Monetary Fund (2004b). *Government Finance Statistics Yearbook*. Washington, DC: IMF.

International Monetary Fund (2005). *Annual Report on Exchange Arrangements and Exchange Restrictions*. Washington, DC: IMF.

Lopez-Claros, Augusto, and Klaus Schwab (2005). *The Arab World Competitiveness Report 2005*. Geneva: World Economic Forum.

Monetary Research (2003). *MRI Bankers' Guide to Foreign Currency* (49th Edition). Houston, TX: Monetary Research, Inc.

Monetary Research (2005/06). *MRI Bankers' Guide to Foreign Currency*. Houston, TX: Monetary Research, Inc.

PRS Group (1979-2004). *International Country Risk Guide*. East Syracuse, NY: PRS.

PRS Group (2006). *International Country Risk Guide*. Data purchased from http://www.prsgroup.com/icrg/icrg.html.

World Bank (2005a). *World Development Indicators 2005* (CD-ROM). Washington, DC: The World Bank.

World Bank (2005b). Doing Business Database. Available online at http://rru.worldbank.org/DoingBusiness/.

World Bank (2005c). *World Development Indicators 2005*. Washington, DC: International Bank for Reconstruction and Development and World Bank.

World Bank (2006a). *World Development Indicators 2006* (CD-ROM). Washington, DC: The World Bank.

World Bank (2006b). Doing Business Database. Available online at http://rru.worldbank.org/DoingBusiness/.

World Bank (2006c). *World Development Indicators 2006*. Washington, DC: International Bank for Reconstruction and Development and World Bank.

World Bank Group (2003). *World Bank Survey of Bank Regulation and Supervision*. Available online at http://www.worldbank.org/research/interest/2003_bank_survey/2003_bank_regulation_database.htm.

APPENDIX A: ECONOMIC FREEDOM AND ITS IMPORTANCE

Economic freedom is key to increasing prosperity, particularly among the emerging nations, according to the empirical research. Empirical studies in top academic journals have shown that economic freedom promotes growth, prosperity, and other positive outcomes. The relationship of economic freedom to prosperity is unsurprising. Individuals and families are best able to look after themselves when free to do so, without external constraints. Moreover, economic freedom has intrinsic value and is inextricably linked to all other freedoms. The freedom of an individual or family to determine their own economic destiny liberates them from government dependence and opens the door to other freedoms.

Since the publication of the first edition of the *Economic Freedom of the World* in 1996, there have been about 200 scholarly articles that have used the its index to explore the relationship between economic freedom and other socio-economic outcomes. Here, we will briefly focus on the relationship of economic freedom to growth and prosperity. Intuitively, economic freedom should have a positive impact on economic growth because economic freedom creates a climate that allows individuals and business to allocate their resources to the highest end use. However, the question is ultimately an empirical one.

One of the first studies, Easton and Walker (1997), found that changes in economic freedom have a significant impact on the steady-state level of income even after the level of technology, the level of education of the workforce, and the level of investment are taken into account.

De Haan and Sturm (2000) empirically show that positive (negative) changes in economic freedom lead to positive (negative) changes in economic growth rates. Using the economic freedom index published in Gwartney et al. (1996) and per-capita GDP data for 80 countries, their results indicate that after accounting for educational level, investment, and population growth, changes in economic freedom have a significant impact on economic growth. For a summary of literature on economic freedom and economic prosperity, see Berggren (2003) and Doucouliagos and Ulubasoglu (2006).

Gwartney and Lawson (2004) examined the impact of economic freedom on economic growth but with a specific focus on investment and productivity. They found that economic freedom strongly promotes investment. Nations with an economic freedom score below 5 (on a scale from zero to 10 where higher value indicates higher level of economic freedom) attracted US$845 in investment per worker over the period from 1980 to 2000 and only US$68 per worker in foreign direct investment. Nations with an economic freedom score above 7 attracted US$10,871 in investment per worker, including US$3,117 of foreign direct investment.

Moreover, investment is more productive in economically free nations. Holding constant factors thought to affect growth and productivity, such as initial per-capita GDP, tropical location, coastal location, change in human investment, and public investment, Gwartney and Lawson found that an increase of one percentage point in the ratio of private investment to GDP leads to increases in the growth rate of per-capita GDP by 0.33 percentage point in an economically free country. The same increase in private investment in a less economically free country increases the growth rate of per-capita GDP by 0.19 percentage point. In other words, investment in economically free nations (with a score above 7) had a positive impact on growth that was 70% greater than investment in nations with poor levels of economic freedom (below 5).

Using the same regression model, Gwartney and Lawson also calculated the impact of economic freedom on overall growth through both direct and indirect effects. They found that, if a nation increased its economic freedom by one unit (on a scale from zero to 10) in the 1980s, it would have seen increased growth of 1.9 percentage points a year, over the period from 1980 to 2000. Because of the high rates of growth associated with economic freedom, they also found that over the long term economic freedom explains over two thirds of the cross-country variation in GDP.

A large body of peer-reviewed empirical research shows similar results as well as economic freedom's relationship with other positive outcomes. For a sample of literature on economic freedom, see the web site, *www.freetheworld.com.*

APPENDIX B: EXPLANATORY NOTES AND DATA SOURCES

The index published in *Economic Freedom of the Arab World* was derived from 39 distinct pieces of data ("components"). The overall rating was computed by averaging the five areas and area scores were derived by averaging the components within each area.

Note that minimums and maximums used to compute the individual scores were taken from *Economic Freedom of the World: 2006 Annual Report* (EFW report) instead of the 22 countries included in the index. For those variables not used in the EFW report, minimums and maximums were derived from the 130 countries included in the EFW report. We used "global" instead of regional minimums and maximums because of the small variability in some of the components among the Arab countries.

Although the international data are constantly subject to small revisions, once *Economic Freedom of the Arab World* has been published, we do not incorporate those revisions in the index to preserve its stability.

Area 1: Size of Government: expenditures, taxes, and enterprises

A. General government consumption spending as a percentage of total consumption.

The rating for this component is equal to: $(V_{max} - V_i) / (V_{max} - V_{min})$ multiplied by 10. The V_i is the country's actual government consumption as a proportion of total consumption, while the V_{max} and V_{min} were the maximum and minimum values set to 40 and 6 respectively.
Sources: World Bank, 2005a, 2006a.

B. Transfers and subsidies as a percentage of GDP

The rating for this component is equal to: $(V_{max} - V_i) / (V_{max} - V_{min})$ multiplied by 10. The V_i is the country's ratio of transfers and subsidies to GDP, while the V_{max} and V_{min} represent the maximum and minimum values of this component in *Economic Freedom of the World*.
Sources: World Bank, 2005a, 2006a.

C. Government enterprises and investment as a percentage of total investment

Sources: Gwartney and Lawson, 2005, 2006.

D. Top marginal tax rate (and income threshold at which it applies)

Countries with higher marginal tax rates that take effect at lower income thresholds received lower ratings based on the matrix which follows:

	Income Threshold Level, in US Dollars			
Top Marginal Tax Rate	<$ 25,000	$25,000 -$50,000	$50,000 - $150,000	>$150,000
< 20%	10	10	10	10
21 to 25	9	9	10	10
26 to 30	8	8	9	9
31 to 35	7	7	8	9
36 to 40	5	6	7	8
41 to 45	4	5	6	7
46 to 50	3	4	5	5
51 to 55	2	3	4	4
56 to 60	1	2	3	3
61 to 65	0	1	2	2
66 to 70	0	0	1	1
> 70%	0	0	0	0

Sources: World Bank, 2005a, 2006a; Ernst & Young, 2003.

Area 2: Commercial and Economic Law and Security of Property Rights

A. Military interference in rule of law and the political process

This component is based on the Political Risk Component G (Military in Politics) from the *International Country Risk Guide*.
Sources: PRS Group, 1979-2004, 2006.

B. Integrity of the legal system

This component is based on the Political Risk Component I (Law and Order) from the *International Country Risk Guide*.
Sources: PRS Group, 1979-2004, 2006.

C. Registering Property - measures the ease of registering property

i) number of procedures
ii) time (days)
iii) cost (% of property value)
Sources: World Bank, 2005b, 2006b.

D. Enforcing Contracts - payment dispute

i) number of procedures
ii) time (days)
iii) cost (% of debt)
Sources: World Bank, 2005b, 2006b.

Area 3: Access to Sound Money

A. Average annual growth of the money supply in the last five years minus average annual growth of real GDP in the last ten years

The M1 money supply figures were used to measure the growth rate of the money supply. The rating is equal to: $(V_{max} - V_i) / (V_{max} - V_{min})$ multiplied by 10. V_i represents the average annual growth rate of the money supply during the last five years adjusted for the growth of real GDP during the previous 10 years. The values for V_{min} and V_{max} were set at zero and 50%, respectively.
Sources: World Bank, 2005a, 2006a.

B. Standard inflation variability during the last five years

The Consumer Price Index (CPI) was used as the measure of inflation for this component. The following formula was used to determine the zero-to-10 scale rating for each country: $(V_{max} - V_i) / (V_{max} - V_{min})$ multiplied by 10. V_i represents the country's standard deviation of the annual rate of inflation during the last five years. The values for V_{min} and V_{max} were set at zero and 25%, respectively.
Sources: World Bank, 2005a, 2006a; EconStats Database, 2005.

C. Recent inflation rate

The Consumer Price Index (CPI) was used as the measure of inflation for this component. The zero-to-10 country ratings were derived by the following formula: $(V_{max} - V_i) / (V_{max} - V_{min})$ multiplied by 10. V_i represents the rate of inflation during the most recent year. The values for V_{min} and V_{max} were set at zero and 50%, respectively; the lower the rate of inflation, the higher the rating.
Sources: World Bank, 2005a, 2006a; EconStats Database, 2005.

D. Freedom to own foreign currency bank accounts domestically and abroad

Sources: International Monetary Fund, 2004a, 2005.

Area 4: Freedom to trade internationally

A. Taxes on international trade

i) Revenue from taxes on international trade as a percentage of exports plus imports
The formula used to calculate the ratings for this component was: $(V_{max} - V_i) / (V_{max} - V_{min})$ multiplied by 10. V_i represents the revenue derived from taxes on international trade as a share of the trade sector. The values for V_{min} and V_{max} were set at zero and 15%, respectively.
Sources: World Bank, 2005a, 2006a; International Monetary Fund, 2004b.

ii) Mean tariff rate
The formula used to calculate the zero-to-10 rating for each country was: $(V_{max} - V_i) / (V_{max} - V_{min})$ multiplied by 10. V_i represents the country's mean tariff rate. The values for V_{min} and V_{max} were set at zero and 50%, respectively.
Sources: World Bank, 2005c, 2006c.

iii) Standard deviation of tariff rates
Compared to a uniform tariff, wide variation in tariff rates exerts a more restrictive impact on trade, and therefore on economic freedom. Thus, countries with greater variation in their tariff rates should be given lower ratings. The formula used to calculate the zero-to-10 ratings for this component was: $(V_{max} - V_i) / (V_{max} - V_{min})$ multiplied by 10. V_i represents the standard deviation of the country's tariff rates. The values for V_{min} and V_{max} were set at zero and 25%, respectively.
Sources: Gwartney and Lawson, 2005, 2006.

B. Difference between official exchange rate and black market rate

The formula used to calculate the zero-to-10 ratings for this component was the following: $(V_{max} - V_i) / (V_{max} - V_{min})$ multiplied by 10. V_i is the country's black-market exchange rate premium. The values for V_{min} and V_{max} were set at zero and 50%, respectively.
Sources: Monetary Research, 2003, 2005/06.

C. Restrictions on the freedom of citizens to engage in capital market exchange with foreigners – index of capital controls among 13 IMF categories

Sources: International Monetary Fund, 2004a, 2005.

Area 5: Regulation of Credit, Labour, and Business

A. Credit Market Regulations

i) Ownership of banks
Source: World Bank Group, 2003.

ii) Competition: domestic banks face competition from foreign banks

If a country approved all or most foreign bank applications and if foreign banks had a large share of the banking sector assets, then the country received a higher rating according to table below.

		Foreign Bank License Denial Rate (Denials/Applications)		
		0%	0-49%	50-10%
Foreign bank assets as a share of total banking sector assets	80-100%	10	8	5
	40-79%	9	7	4
	0-39%	8	6	3

Source: The World Bank Group, 2003

iii) Avoidance of interest rate controls and regulations that lead to negative real interest rates

Data on credit-market controls and regulations were used to construct rating intervals. Countries with interest rates determined by the market, stable monetary policy, and positive real deposit and lending rates received higher ratings. When interest rates were determined primarily by market forces and the real rates were positive, countries were given a rating of 10. When interest rates were primarily market-determined but the real rates were sometimes slightly negative (less than 5%) or the differential between the deposit and lending rates was large (8% or more), countries received a rating of 8. When the real deposit or lending rate was persistently negative by a single-digit amount or the differential between them was regulated by the government, countries were rated at 6. When the deposit and lending rates were fixed by the government and the real rates were often negative by single-digit amounts, countries were assigned a rating of 4. When the real deposit or lending rate was persistently negative by a double-digit amount, countries received a rating of 2. A zero rating was assigned when the deposit and lending rates were fixed by the government and real rates were persistently negative by double-digit amounts or hyperinflation had virtually eliminated the credit market.
Sources: World Bank, 2005a, 2006a; EconStats Database, 2005.

iv) Getting Credit

a) Legal Rights Index
b) Credit Information Index
Sources: World Bank, 2005b, 2006b.

B. Labour Market Regulations

i) Rigidity of Employment Index
a) Difficulty of Hiring Index
b) Rigidity of Hours Index
c) Difficulty of Firing Index
Sources: World Bank, 2005b, 2006b.

ii) Hiring costs (% of salary)
Sources: World Bank, 2005b, 2006b.

iii) Firing costs (weeks of wages)
Sources: World Bank, 2005b, 2006b.

iv) Use of conscripts to obtain military personnel
Sources: Gwartney and Lawson, 2005, 2006.

C. Business Regulations

i) Starting a business (the ease of starting a business)
a) number of procedures

b) duration (days)
c) cost (% of income per capita)
d) minimum capital (% of income per capita)
Sources: World Bank, 2005b, 2006b.

ii) Closing a business (difficulty of closing a business)

a) time (years)
b) cost (% of estate)
c) recovery rate (cents on the dollar)
Sources: World Bank, 2005b; 2006b.

COUNTRY TABLES

This section presents detailed economic freedom scores for all components used in constructing an index for the 22 countries of the League of Arab States. An overall score was computed for 12 of the nations included in Economic Freedom of the Arab World; an overall score could not be computed for the remaining 10 due to a lack of data. For all countries, we present area scores as well as scores for each component, where data were available. All the scores in the index are values out of 10: 10 is the highest possible score and zero (0) is the lowest. A higher score indicates a greater degree of economic freedom.

A more complete description of each component, including the methodology used to calculate the scores, can be found in the Appendix B: Explanatory Notes and Data Sources

Data Available to Researchers

The full data-set, including all of the scores published in this report as well as data on which these scores were based, can be freely downloaded at <http://www.freetheworld.com>. If you have any difficulties downloading the data, please feel free to contact us via e-mail to *freetheworld@fraserinstitute.ca* or via telephone at +1.604.714.4563.

Table 1: Overall Economic Freedom Scores and Ranks

2004	Algeria	Bahrain	Comoros	Djibouti	Egypt, Arab Rep.	Iraq	Jordan	Kuwait	Lebanon	Libya	Mauritania	Morocco	Oman	Qatar	Saudi Arabia	Somalia	Sudan	Syrian Arab Republic	Tunisia	United Arab Emirates	West Bank and Gaza	Yemen, Rep.
Overall Economic Freedom Score	5.3				6.6		7.6	7.8	7.7			6.0	8.0		7.5			6.1	6.4	7.7		7.4
Overall Economic Freedom Rank	12				8		5	2	3			11	1		6			10	9	3		7

2003	Algeria	Bahrain	Comoros	Djibouti	Egypt, Arab Rep.	Iraq	Jordan	Kuwait	Lebanon	Libya	Mauritania	Morocco	Oman	Qatar	Saudi Arabia	Somalia	Sudan	Syrian Arab Republic	Tunisia	United Arab Emirates	West Bank and Gaza	Yemen, Rep.
Overall Economic Freedom Score	5.0				6.6		7.5	7.9	8.1			6.1	8.1		7.8			5.7	6.4	7.9		7.4
Overall Economic Freedom Rank	12				8		6	3	1			10	1		5			11	9	3		7

2002	Algeria	Bahrain	Comoros	Djibouti	Egypt, Arab Rep.	Iraq	Jordan	Kuwait	Lebanon	Libya	Mauritania	Morocco	Oman	Qatar	Saudi Arabia	Somalia	Sudan	Syrian Arab Republic	Tunisia	United Arab Emirates	West Bank and Gaza	Yemen, Rep.
Overall Economic Freedom Score	5.0				6.7		7.6	8.0	8.1			6.2	8.1		7.8			5.8	6.4	7.9		7.4
Overall Economic Freedom Rank	12				8		6	3	1			10	1		5			11	9	4		7

Table 2: Area 1. Size of Government: Expenditures, Taxes, and Enterprises

2004	Algeria	Bahrain	Comoros	Djibouti	Egypt, Arab Rep.	Iraq	Jordan	Kuwait	Lebanon	Libya	Mauritania	Morocco	Oman	Qatar	Saudi Arabia	Somalia	Sudan	Syrian Arab Republic	Tunisia	United Arab Emirates	West Bank and Gaza	Yemen, Rep.
A. General government consumption spending as a percentage of total consumptior	3.7	3.3	6.7		7.4		7.6	1.3	6.8	5.1	5.9	4.2	1.9		0.0		7.4	6.5	5.8	5.7	0.3	7.2
B. Transfers and subsidies as a percentage of GDP	6.8	9.5			9.5		8.6	7.0	9.2				9.4									
C. Government enterprises and investment as a percentage of total investment	0.0	4.0			4.0		0.0	6.0				4.0	2.0					0.0	2.0	6.0		
D. Top marginal tax rate (and income threshold at which it applies)		10.0			7.0		7.0	10.0	10.0			4.0	10.0	10.0	10.0			8.0	7.0	10.0	10.0	7.0
Area 1 Score	3.5	6.7			7.0		5.8	6.1	8.7			4.1	5.8		5.0			4.8	4.9	7.2	5.1	7.1
Area 1 Rank	14	5			4		7	6	1			13	7		10			12	11	2	9	3

2003	Algeria	Bahrain	Comoros	Djibouti	Egypt, Arab Rep.	Iraq	Jordan	Kuwait	Lebanon	Libya	Mauritania	Morocco	Oman	Qatar	Saudi Arabia	Somalia	Sudan	Syrian Arab Republic	Tunisia	United Arab Emirates	West Bank and Gaza	Yemen, Rep.
A. General government consumption spending as a percentage of total consumptior	5.7	4.7			7.8		6.2	3.9	8.4	6.2	6.9	5.9	3.8		2.3			7.9	6.6			7.6
B. Transfers and subsidies as a percentage of GDP	5.9	9.2			9.2		8.8		9.1				9.1									
C. Government enterprises and investment as a percentage of total investment	0.0	4.0			4.0		0.0	6.0				4.0	2.0					0.0	2.0	6.0		
D. Top marginal tax rate (and income threshold at which it applies)		10.0			7.0		7.0	10.0	10.0			4.0	10.0	10.0	10.0			8.0	7.0	10.0		7.0
Area 1 Score	3.9	7.0			7.0		5.5	6.6	9.2			4.6	6.2		6.1			5.3	5.2	8.0		7.3
Area 1 Rank	13	4			4		9	6	1			12	7		8			10	11	2		3

2002	Algeria	Bahrain	Comoros	Djibouti	Egypt, Arab Rep.	Iraq	Jordan	Kuwait	Lebanon	Libya	Mauritania	Morocco	Oman	Qatar	Saudi Arabia	Somalia	Sudan	Syrian Arab Republic	Tunisia	United Arab Emirates	West Bank and Gaza	Yemen, Rep.
A. General government consumption spending as a percentage of total consumptior	5.6	4.7			8.5		6.4	4.1	8.3	6.2	6.9	6.1	3.8		2.5			7.7	6.6			7.4
B. Transfers and subsidies as a percentage of GDP	5.9	9.2			9.2		8.9		9.1				9.1									
C. Government enterprises and investment as a percentage of total investment	0.0	4.0			4.0		0.0	6.0				4.0	2.0					0.0	2.0	6.0		
D. Top marginal tax rate (and income threshold at which it applies)		10.0			7.0		7.0	10.0	10.0			4.0	10.0	10.0	10.0			8.0	7.0	10.0		7.0
Area 1 Score	3.8	7.0			7.2		5.6	6.7	9.1			4.7	6.2		6.3			5.2	5.2	8.0		7.2
Area 1 Rank	13	5			3		9	6	1			12	8		7			10	10	2		3

Table 3: Area 2. Commercial and Economic Law and Security of Property Rights

2004	Algeria	Bahrain	Comoros	Djibouti	Egypt, Arab Rep.	Iraq	Jordan	Kuwait	Lebanon	Libya	Mauritania	Morocco	Oman	Qatar	Saudi Arabia	Somalia	Sudan	Syrian Arab Republic	Tunisia	United Arab Emirates	West Bank and Gaza	Yemen, Rep.
A. Military interference in rule of law and the political process	5.0	5.0			5.0	0.0	8.3	8.3	3.3	5.0		6.7	8.3	6.7	8.3	1.7	0.0	3.3	6.7	8.3		6.7
B. Integrity of the legal system	5.0	8.3			6.7	2.5	6.7	8.3	6.7	6.7		8.3	8.3	8.3	8.3	0.8	4.2	8.3	8.3	6.7		3.3
C. Registering Property	6.7		7.0	7.4	7.7	8.6	7.7	8.6	8.1		8.8	8.9	9.5		9.5		8.8	6.3	8.5	9.4	8.0	8.7
i) number of procedures	3.0		8.0	7.0	7.0	8.0	6.5	6.5	6.5		8.5	8.5	9.5		8.5		7.5	8.5	8.0	9.0	5.5	7.5
ii) time (days)	9.5		9.8	9.5	8.0	9.9	9.8	9.4	9.7		9.5	9.5	9.8		10.0		9.9	9.7	9.4	9.9	9.3	9.8
iii) cost (% of property value)	7.6		3.2	5.6	8.1	7.9	6.7	9.9	8.1		8.3	8.6	9.0		10.0		8.9	0.8	8.0	9.4	9.2	8.7
D. Enforcing Contracts	6.6		4.8	3.6	4.5	5.5	7.1	6.3	6.3		7.1	6.5	6.6		6.9		4.8	5.4	8.4	7.1	7.4	7.6
i) number of procedures	2.0		0.0	0.0	0.7	0.0	3.4	1.4	4.3		4.1	3.6	3.9		3.2		0.0	2.5	8.4	5.5	7.3	4.8
ii) time (days)	7.9		5.5	1.7	3.3	7.0	8.3	7.9	5.5		7.8	6.3	6.4		8.1		5.1	4.3	7.2	6.3	5.6	8.1
iii) cost (% of debt)	9.8		8.9	9.0	9.4	9.6	9.5	9.6	9.0		9.4	9.5	9.7		9.3		9.3	9.3	9.5	9.4	9.3	9.8
Area 2 Score	5.8	6.7	5.9	5.5	6.0	4.1	7.4	7.9	6.1	5.8	7.9	7.6	8.2	7.5	8.3	1.3	4.4	5.8	8.0	7.9	7.7	6.6
Area 2 Rank	16	11	15	19	14	21	10	4	13	16	4	8	2	9	1	22	20	16	3	4	7	12

2003	Algeria	Bahrain	Comoros	Djibouti	Egypt, Arab Rep.	Iraq	Jordan	Kuwait	Lebanon	Libya	Mauritania	Morocco	Oman	Qatar	Saudi Arabia	Somalia	Sudan	Syrian Arab Republic	Tunisia	United Arab Emirates	West Bank and Gaza	Yemen, Rep.
A. Military interference in rule of law and the political process	0.0	5.0			5.0		8.3	8.3	3.3	5.0		6.7	8.3	6.7	8.3			3.3	6.7	8.3		6.7
B. Integrity of the legal system	3.3	8.3			6.7		6.7	8.3	6.7	6.7		8.3	8.3	8.3	8.3			8.3	8.3	6.7		3.3
C. Registering Property	6.3				7.7		7.7	8.5	8.1		8.6	8.7	9.1		9.5			6.1	8.5	9.4		8.7
i) Number of Procedures	2.5				7.0		6.5	6.5	6.5		8.5	9.0	8.5		8.5			8.5	8.0	9.0		7.5
ii) Time (days)	9.5				8.0		9.8	9.2	9.7		9.5	9.2	9.8		10.0			9.7	9.4	9.9		9.8
iii) Cost (% of property value)	7.1				8.0		6.7	9.8	8.1		7.8	8.0	9.0		10.0			0.0	8.0	9.4		8.7
D. Enforcing Contracts	6.1				5.8		6.9	6.1	6.1		7.6	8.9	6.8		6.7			5.5	9.7	5.5		7.3
i) Number of Procedures	1.9				0.6		3.2	1.3	4.0		6.4	8.7	3.6		3.0			2.3	9.4	1.1		4.5
ii) Time (days)	7.3				7.3		7.8	7.5	5.2		7.3	8.5	7.0		7.7			5.5	10.0	5.9		7.7
iii) Cost (% of debt)	9.0				9.4		9.8	9.6	9.1		9.0	9.5	9.8		9.4			8.8	9.7	9.5		9.8
Area 2 Score	3.9	6.7			6.3		7.4	7.8	6.1	5.8	8.1	8.2	8.1	7.5	8.2			5.8	8.3	7.5		6.5
Area 2 Rank	16	10			12		9	6	13	14	4	2	4	7	2			14	1	7		11

2002	Algeria	Bahrain	Comoros	Djibouti	Egypt, Arab Rep.	Iraq	Jordan	Kuwait	Lebanon	Libya	Mauritania	Morocco	Oman	Qatar	Saudi Arabia	Somalia	Sudan	Syrian Arab Republic	Tunisia	United Arab Emirates	West Bank and Gaza	Yemen, Rep.
A. Military interference in rule of law and the political process	0.0	5.0			5.0		8.3	8.3	3.3	5.0		6.7	8.3	6.7	8.3			3.3	6.7	8.3		6.7
B. Integrity of the legal system	3.3	8.3			6.7		6.7	8.3	6.7	6.7		10.0	8.3	8.3	8.3			8.3	8.3	6.7		3.3
C. Registering Property	6.3				7.7		7.7	8.5	8.1		8.6	8.7	9.1		9.5			6.1	8.5	9.4		8.7
i) Number of Procedures	2.5				7.0		6.5	6.5	6.5		8.5	9.0	8.5		8.5			8.5	8.0	9.0		7.5
ii) Time (days)	9.5				8.0		9.8	9.2	9.7		9.5	9.2	9.8		10.0			9.7	9.4	9.9		9.8
iii) Cost (% of property value)	7.1				8.0		6.7	9.8	8.1		7.8	8.0	9.0		10.0			0.0	8.0	9.4		8.7
D. Enforcing Contracts	6.1				5.8		6.9	6.1	6.1		7.6	8.9	6.8		6.7			5.5	9.7	5.5		7.3
i) Number of Procedures	1.9				0.6		3.2	1.3	4.0		6.4	8.7	3.6		3.0			2.3	9.4	1.1		4.5
ii) Time (days)	7.3				7.3		7.8	7.5	5.2		7.3	8.5	7.0		7.7			5.5	10.0	5.9		7.7
iii) Cost (% of debt)	9.0				9.4		9.8	9.6	9.1		9.0	9.5	9.8		9.4			8.8	9.7	9.5		9.8
Area 2 Score	3.9	6.7			6.3		7.4	7.8	6.1	5.8	8.1	8.6	8.1	7.5	8.2			5.8	8.3	7.5		6.5
Area 2 Rank	16	10			12		9	6	13	14	4	1	4	7	3			14	2	7		11

Table 4: Area 3. Access to Sound Money

2004	Algeria	Bahrain	Comoros	Djibouti	Egypt, Arab Rep.	Iraq	Jordan	Kuwait	Lebanon	Libya	Mauritania	Morocco	Oman	Qatar	Saudi Arabia	Somalia	Sudan	Syrian Arab Republic	Tunisia	United Arab Emirates	West Bank and Gaza	Yemen, Rep.
A. Average annual growth of the money supply in the last five years minus average annual growth of real GDP in the last ten years	6.8	7.9	7.0	8.1	8.3		8.4	6.9	9.5	9.1	8.5	8.5	8.2		8.3		5.2	7.2	9.6	6.9		8.4
B. Standard inflation variability during the last five years	9.4	9.5			8.5		9.6	9.7	9.6	8.5	8.9	9.7	9.8	9.0	9.7		9.5	8.8	9.8	9.7		8.7
C. Recent inflation rate	9.3	9.7			7.7		9.3	9.8	9.7	9.6	7.9	9.8	9.9	8.6	9.9		8.3	9.8	9.3	9.4		7.8
D. Freedom to own foreign currency bank accounts domestically and abroad	0.0	10.0	0.0	10.0	10.0	5.0	10.0	10.0	10.0	0.0	5.0	0.0	10.0	10.0	10.0	0.0	5.0	5.0	0.0	10.0		10.0
Area 3 Score	6.4	9.3	3.5	9.1	8.6		9.3	9.1	9.7	6.8	7.6	7.0	9.5	9.2	9.5		7.0	7.7	7.2	9.0		8.7
Area 3 Rank	18	4	19	7	11		4	7	1	17	13	15	2	6	2		15	12	14	9		10
2003	Algeria	Bahrain	Comoros	Djibouti	Egypt, Arab Rep.	Iraq	Jordan	Kuwait	Lebanon	Libya	Mauritania	Morocco	Oman	Qatar	Saudi Arabia	Somalia	Sudan	Syrian Arab Republic	Tunisia	United Arab Emirates	West Bank and Gaza	Yemen, Rep.
A. Average annual growth of the money supply in the last five years minus average annual growth of real GDP in the last ten years	7.7	8.2			8.9		8.4	6.9	9.3		8.5	8.6	9.3		8.5			7.2	9.3	8.2		8.3
B. Standard inflation variability during the last five years	9.4	9.6			9.7		9.7	9.7	9.6	7.9	9.7	9.6	9.7	9.7	9.6			8.4	9.9	9.7		8.7
C. Recent inflation rate	9.5	9.8			9.1		9.5	9.8	9.7	9.6	9.0	9.8	9.9	9.5	9.9			9.0	9.5	9.4		7.8
D. Freedom to own foreign currency bank accounts domestically and abroad	0.0	10.0			10.0		10.0	10.0	10.0	5.0	5.0	0.0	10.0	10.0	10.0			5.0	0.0	10.0		10.0
Area 3 Score	6.6	9.4			9.4		9.4	9.1	9.7	7.5	8.0	7.0	9.7	9.7	9.5			7.4	7.2	9.3		8.7
Area 3 Rank	16	5			5		5	9	1	12	11	15	1	1	4			13	14	8		10
2002	Algeria	Bahrain	Comoros	Djibouti	Egypt, Arab Rep.	Iraq	Jordan	Kuwait	Lebanon	Libya	Mauritania	Morocco	Oman	Qatar	Saudi Arabia	Somalia	Sudan	Syrian Arab Republic	Tunisia	United Arab Emirates	West Bank and Gaza	Yemen, Rep.
A. Average annual growth of the money supply in the last five years minus average annual growth of real GDP in the last ten years	7.2	8.2			9.0		9.4	8.7	9.6		8.8	8.6	9.3		8.8			8.0	9.2	8.2		8.5
B. Standard inflation variability during the last five years	9.2	9.6			9.8		9.6	9.6	9.2	7.5	9.2	9.6	9.7	9.6	9.7			8.8	9.8	9.7		8.6
C. Recent inflation rate	9.7	9.8			9.5		9.6	9.7	9.6	8.0	9.2	9.4	9.9	10.0	10.0			9.8	9.5	9.4		7.6
D. Freedom to own foreign currency bank accounts domestically and abroad	0.0	10.0			10.0		10.0	10.0	10.0	5.0	5.0	0.0	10.0	10.0	10.0			5.0	0.0	10.0		10.0
Area 3 Score	6.5	9.4			9.6		9.7	9.5	9.6	6.8	8.1	6.9	9.7	9.9	9.6			7.9	7.1	9.3		8.7
Area 3 Rank	16	8			4		2	7	4	15	11	14	2	1	4			12	13	9		10

Table 5: Area 4. Freedom to Trade Internationally

2004	Algeria	Bahrain	Comoros	Djibouti	Egypt, Arab Rep.	Iraq	Jordan	Kuwait	Lebanon	Libya	Mauritania	Morocco	Oman	Qatar	Saudi Arabia	Somalia	Sudan	Syrian Arab Republic	Tunisia	United Arab Emirates	West Bank and Gaza	Yemen, Rep.
A. Taxes on international trade	5.2	9.4		3.8	4.1		6.3	9.2	8.3	6.0	7.4	3.1	9.0	9.2	8.7		5.8	7.1	6.1			
i) Revenue from taxes on international trade as a percentage of exports plus imports	5.0	9.4			6.0		8.0	9.2	8.1										8.5			
ii) Mean tariff rate	6.4			3.8	6.2		7.1	9.3	8.6	6.0	7.4	4.3	8.4	9.2	8.7		5.8	7.1	4.9			
iii) Standard deviation of tariff rates	4.3				0.0		3.8					1.8	9.5						5.0			
B. Difference between official exchange rate and black market rate	8.1	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	9.6	10.0	10.0	10.0	10.0	10.0	10.0	9.3	10.0		10.0
C. Restrictions on the freedom of citizens to engage in capital market exchange with foreigners-index of capital controls among 13 IMF categories	0.8	5.4	3.1	5.4	5.4	0.0	7.7	4.6	2.3	0.0	0.8	0.8	6.7	7.7	2.3	0.0	1.8	1.0	0.8	6.2		6.9
Area 4 Score	4.7	8.3	6.5	6.4	6.5	5.0	8.0	7.9	6.9	5.3	6.1	4.5	8.5	9.0	7.0	5.0	5.9	6.0	5.4	8.1		8.5
Area 4 Rank	20	4	10	12	10	18	6	7	9	17	13	21	2	1	8	18	15	14	16	5		2
2003	Algeria	Bahrain	Comoros	Djibouti	Egypt, Arab Rep.	Iraq	Jordan	Kuwait	Lebanon	Libya	Mauritania	Morocco	Oman	Qatar	Saudi Arabia	Somalia	Sudan	Syrian Arab Republic	Tunisia	United Arab Emirates	West Bank and Gaza	Yemen, Rep.
A. Taxes on international trade	5.2	9.2			6.0		6.3	9.3	7.9	6.0	7.6	3.0	9.0		8.7			7.1	6.1			
i. Revenue from taxes on international trade as a percentage of exports plus imports	4.9	9.2			5.9		7.9		7.2										8.3			
ii. Mean tariff rate	6.3				6.2		7.1	9.3	8.5	6.0	7.6	4.2	8.4		8.7			7.1	4.9			
iii. Standard deviation of tariff rates	4.3						3.8					1.8	9.5						5.0			
B. Difference between official exchange rate and black market rate	8.1	10.0			5.5		10.0	10.0	10.0	5.8	10.0	7.9	10.0	10.0	10.0			5.3	7.8	10.0		10.0
C. Restrictions on the freedom of citizens to engage in capital market exchange with foreigners-index of capital controls among 13 IMF categories	0.8	6.9			5.4		7.7	4.6	6.2	0.0	1.7	1.5	6.4	8.5	5.4			0.0	0.8	6.2		6.9
Area 4 Score	4.7	8.7			5.6		8.0	8.0	8.0	3.9	6.4	4.2	8.4	9.2	8.0			4.1	4.9	8.1		8.5
Area 4 Rank	13	2			11		6	6	6	16	10	14	4	1	6			15	12	5		3
2002	Algeria	Bahrain	Comoros	Djibouti	Egypt, Arab Rep.	Iraq	Jordan	Kuwait	Lebanon	Libya	Mauritania	Morocco	Oman	Qatar	Saudi Arabia	Somalia	Sudan	Syrian Arab Republic	Tunisia	United Arab Emirates	West Bank and Gaza	Yemen, Rep.
A. Taxes on international trade	5.2	9.3			6.0		6.2	9.3	7.9	6.0	7.6	3.0	9.0		8.7			7.1	6.0			
i. Revenue from taxes on international trade as a percentage of exports plus imports	4.9	9.3			5.9		7.7		7.2										8.1			
ii. Mean tariff rate	6.3				6.2		7.1	9.3	8.5	6.0	7.6	4.2	8.4		8.7			7.1	4.9			
iii. Standard deviation of tariff rates	4.3						3.8					1.8	9.5						5.0			
B. Difference between official exchange rate and black market rate	8.1	10.0			5.5		10.0	10.0	10.0	5.8	10.0	7.9	10.0	10.0	10.0			5.3	7.8	10.0		10.0
C. Restrictions on the freedom of citizens to engage in capital market exchange with foreigners—index of capital controls among 13 IMF categories	0.8	6.9			5.4		7.7	4.6	6.2	0.0	1.7	1.5	6.4	8.5	5.4			0.0	0.8	6.2		6.9
Area 4 Score	4.7	8.7			5.6		8.0	8.0	8.0	3.9	6.4	4.2	8.4	9.2	8.0			4.1	4.8	8.1		8.5
Area 4 Rank	13	2			11		6	6	6	16	10	14	4	1	6			15	12	5		3

Table 6: Area 5. Regulation of Credit, Labour, and Business

2004	Algeria	Bahrain	Comoros	Djibouti	Egypt, Arab Rep.	Iraq	Jordan	Kuwait	Lebanon	Libya	Mauritania	Morocco	Oman	Qatar	Saudi Arabia	Somalia	Sudan	Syrian Arab Republic	Tunisia	United Arab Emirates	West Bank and Gaza	Yemen, Rep.
A. Credit Market Regulations	5.3	9.0			4.3		7.0	8.1	8.5		6.2	6.3	7.6		7.2		4.3	6.3	5.7	5.4		6.6
i) Ownership of banks	0.0	10.0			2.0		10.0	10.0	10.0			5.0	10.0	5.0	8.0		8.0		5.0	5.0		
ii) Competition: domestic banks face competition from foreign banks	8.0	7.0			3.0		4.0	8.0	8.0			8.0	8.0		8.0		3.0		8.0	8.0		
iii) Avoidance of interest rate controls and regulations that lead to negative real interest rates	10.0	10.0			10.0		10.0	10.0	10.0	10.0	9.0	10.0	10.0					10.0				10.0
iv) Getting Credit	3.2		1.5	2.8	2.2	2.0	4.2	4.5	6.2		3.3	2.3	2.3		5.7		2.0	2.5	4.0	3.2	5.0	3.2
a) Legal Rights Index	3.0		3.0	4.0	1.0	4.0	5.0	4.0	4.0		5.0	3.0	3.0		3.0		4.0	5.0	3.0	3.0	5.0	3.0
b) Credit Information Index	3.3		0.0	1.7	3.3	0.0	3.3	5.0	8.3		1.7	1.7	1.7		8.3		0.0	0.0	5.0	3.3	5.0	3.3
B. Labour Market Regulations	5.3		7.5	7.7	3.7	5.5	8.8	8.9	6.6		5.1	5.8	8.7		8.8		4.4	5.4	6.0	8.4	8.0	6.1
i) Rigidity of Employment Index	5.5		5.4	5.4	4.7	4.1	7.3	8.7	7.6		4.1	3.7	6.5		9.3		4.5	7.0	5.4	8.0	6.9	6.7
a) Difficulty of Hiring Index	5.6		6.1	3.3	10.0	2.2	8.9	10.0	6.7		3.3	0.0	5.6		10.0		4.4	10.0	8.3	10.0	6.7	10.0
b) Rigidity of Hours Index	4.0		4.0	6.0	4.0	4.0	8.0	6.0	10.0		4.0	6.0	4.0		8.0		4.0	6.0	6.0	4.0	6.0	4.0
c) Difficulty of Firing Index	7.0		6.0	7.0	0.0	6.0	5.0	10.0	6.0		5.0	5.0	10.0		10.0		5.0	5.0	2.0	10.0	8.0	6.0
ii) Hiring costs (% of salary)	5.0		10.0	7.2	5.3	7.8	8.0	8.0	6.1		7.2	6.8	8.2		8.0		5.5	6.9	6.1	7.7	7.6	8.4
iii) Firing costs (weeks of wages)	9.5		7.2	8.4	4.8	9.9	9.9	8.8	9.5		9.1	7.6	9.9		7.8		6.7	7.8	9.5	7.7	7.5	9.5
iv) Use of conscripts to obtain military personnel	1.0	10.0		10.0	0.0	0.0	10.0	10.0	3.0	1.0	0.0	5.0	10.0	10.0	10.0	10.0	1.0	0.0	3.0	10.0	10.0	0.0
C. Business Regulations	7.5		7.7	6.1	6.5	7.5	6.9	7.3	6.8		5.5	8.0	7.5		6.6		8.2	6.0	8.3	5.8	5.5	6.2
i) Starting a business (the ease of starting a business)	7.9		7.7	7.3	8.1	7.5	7.8	7.9	8.5		7.0	9.2	8.5		7.2		8.2	5.9	8.7	7.5	5.5	5.8
a) number of procedures	2.9		4.7	4.7	5.3	4.7	4.7	3.5	7.6		4.7	7.6	5.9		3.5		5.3	4.1	5.3	4.1	4.1	4.1
b) duration (days)	8.9		9.0	8.3	9.2	6.3	9.2	8.4	7.8		6.0	9.5	8.4		8.2		8.2	8.0	9.6	7.0	5.5	7.0
c) cost (% of income per capita)	9.7		7.7	7.3	9.2	9.2	9.1	10.0	8.7		8.5	9.8	9.9		9.3		9.3	9.7	9.9	9.6	6.1	7.3
d) minimum capital (% of income per capita)	9.9		9.4	8.9	8.6	9.9	8.3	9.8	9.9		8.8	9.9	9.8		7.9		10.0	1.7	9.9	9.3	6.3	5.0
ii) Closing a business (difficulty of closing a business)	7.2			4.9	5.0		6.0	6.6	5.2		4.0	6.7	6.6		5.9			6.1	7.9	4.1		6.5
a) time (years)	7.8			5.2	6.0		5.9	6.0	6.3		2.1	8.5	6.3		7.5			6.1	9.1	5.1		7.3
b) cost (% of estate)	9.2			7.7	7.2		8.9	10.0	7.2		8.9	7.7	9.7		7.2			8.9	9.2	6.1		9.1
c) recovery rate (cents on the dollar)	4.5		0.0	1.7	1.8	0.0	3.0	3.7	2.1		0.8	3.8	3.8		2.9		0.0	3.2	5.5	1.1	0.0	3.1
Area 5 Score	6.0		7.6	6.9	4.8	6.5	7.6	8.1	7.3		5.6	6.7	7.9		7.5		5.6	5.9	6.7	6.5	6.8	6.3
Area 5 Rank	14		3	7	18	11	3	1	6		16	9	2		5		16	15	9	11	8	13

2003	Algeria	Bahrain	Comoros	Djibouti	Egypt, Arab Rep.	Iraq	Jordan	Kuwait	Lebanon	Libya	Mauritania	Morocco	Oman	Qatar	Saudi Arabia	Somalia	Sudan	Syrian Arab Republic	Tunisia	United Arab Emirates	West Bank and Gaza	Yemen, Rep.
A. Credit Market Regulations	4.9	9.0			4.3		7.2	8.5	8.3		6.7	6.0	7.4	6.5	5.7			6.3	5.6	5.6		6.3
i. Ownership of banks	0.0	10.0			2.0		10.0	10.0	10.0			5.0	10.0	5.0	8.0				5.0	5.0		
ii. Competition: domestic banks face competition from foreign banks	8.0	7.0			3.0		4.0	8.0	8.0			8.0	8.0	8.0	3.0				8.0	8.0		
iii. Avoidance of interest rate controls and regulations that lead to negative real interest rates	10.0	10.0			10.0		10.0	10.0	10.0	10.0	9.0	9.0	10.0					10.0				10.0
iv. Getting Credit	1.5				2.2		4.7	5.8	5.3		4.3	1.8	1.5		6.2			2.5	3.7	3.7		2.7
a) Legal Rights Index	3.0				1.0		6.0	5.0	4.0		7.0	2.0	3.0		4.0			5.0	4.0	4.0		2.0
b) Credit Information Index	0.0				3.3		3.3	6.7	6.7		1.7	1.7	0.0		8.3			0.0	3.3	3.3		3.3
B. Labour Market Regulations	5.0				2.8		7.5	8.4	6.4		4.5	5.3	8.6		8.1			4.7	5.7	7.3		5.6
i. Rigidity of Employment Index	4.9				4.7		6.6	8.0	7.6		2.7	4.0	6.5		8.7			6.0	4.6	6.7		6.3
a) Difficulty of Hiring Index	5.6				10.0		8.9	10.0	6.7		0.0	0.0	5.6		10.0			8.9	3.9	10.0		10.0
b) Rigidity of Hours Index	4.0				2.0		6.0	4.0	10.0		4.0	6.0	4.0		6.0			4.0	10.0	2.0		2.0
c) Difficulty of Firing Index	5.0				2.0		5.0	10.0	6.0		4.0	6.0	10.0		10.0			5.0	0.0	8.0		7.0
ii. Hiring Costs (% of salary)	5.0				5.3		8.0	8.0	6.1		6.9	6.8	8.4		8.0			6.9	6.6	7.7		6.9
iii. Firing Costs (weeks of wages)	9.1				1.4		5.2	7.7	9.1		8.4	5.6	9.3		5.8			5.8	8.5	4.9		9.1
iv. Use of conscripts to obtain military personnel	1.0	10.0			0.0		10.0	10.0	3.0	1.0	0.0	5.0	10.0	10.0	10.0			0.0	3.0	10.0		0.0
C. Business Regulations	7.7				7.5		7.5	7.6	7.9		6.9	8.3	7.6		7.0			6.4	8.2	7.2		6.9
i. Starting a Business (the ease of starting a business)	7.9				7.9		7.7	7.9	8.6		7.0	9.1	8.5		6.9			5.4	8.8	7.6		6.0
a) Number of Procedures	2.9				5.3		4.7	3.5	7.6		4.7	8.2	5.9		3.5			4.1	5.9	4.1		4.1
b) Duration (days)	8.8				8.4		8.3	8.4	7.8		6.0	9.6	8.4		6.9			7.8	9.4	7.4		7.0
c) Cost (% Income per capita)	9.8				9.3		9.7	10.0	9.2		9.0	9.9	10.0		9.5			9.8	9.9	9.7		8.3
d) Min. Capital (% Income per capita)	9.9				8.6		8.0	9.7	9.9		8.3	8.6	9.8		7.6			0.0	9.9	9.2		4.7
ii. Closing a Business (difficulty of closing a business)	7.4				7.2		7.3	7.3	7.1		6.7	7.5	6.7		7.2			7.3	7.6	6.9		7.8
a) Time (years)	6.8				6.0		5.9	6.0	6.3		2.1	8.5	3.1		7.5			6.1	9.1	5.1		7.3
b) Cost (% of estate)	9.6				7.2		8.9	10.0	7.2		8.9	7.7	9.6		7.2			8.9	9.2	6.1		9.1
c) Recovery rate (cents on the dollar)	6.0				8.3		7.0	5.9	8.0		9.1	6.2	7.3		6.9			6.9	4.4	9.4		6.9
Area 5 Score	5.8				4.9		7.4	8.2	7.6		6.0	6.5	7.8		7.0			5.8	6.5	6.7		6.3
Area 5 Rank	11				13		4	1	3		10	7	2		5			11	7	6		9

2002	Algeria	Bahrain	Comoros	Djibouti	Egypt, Arab Rep.	Iraq	Jordan	Kuwait	Lebanon	Libya	Mauritania	Morocco	Oman	Qatar	Saudi Arabia	Somalia	Sudan	Syrian Arab Republic	Tunisia	United Arab Emirates	West Bank and Gaza	Yemen, Rep.
A. Credit Market Regulations	4.9	9.0			4.3		7.2	8.5	8.3		6.7	6.0	7.4	6.5	5.7			6.3	5.6	5.6		6.3
i. Ownership of banks	0.0	10.0			2.0		10.0	10.0	10.0			5.0	10.0	5.0	8.0				5.0	5.0		
ii. Competition: domestic banks face competition from foreign banks	8.0	7.0			3.0		4.0	8.0	8.0			8.0	8.0	8.0	3.0				8.0	8.0		
iii. Avoidance of interest rate controls and regulations that lead to negative real interest rates	10.0	10.0			10.0		10.0	10.0	10.0	10.0	9.0	9.0	10.0					10.0				10.0
iv. Getting Credit	1.5				2.2		4.7	5.8	5.3		4.3	1.8	1.5		6.2			2.5	3.7	3.7		2.7
a) Legal Rights Index	3.0				1.0		6.0	5.0	4.0		7.0	2.0	3.0		4.0			5.0	4.0	4.0		2.0
b) Credit Information Index	0.0				3.3		3.3	6.7	6.7		1.7	1.7	0.0		8.3			0.0	3.3	3.3		3.3
B. Labour Market Regulations	5.0				2.8		7.5	8.4	6.4		4.5	5.3	8.6		8.1			4.7	5.7	7.3		5.6
i. Rigidity of Employment Index	4.9				4.7		6.6	8.0	7.6		2.7	4.0	6.5		8.7			6.0	4.6	6.7		6.3
a) Difficulty of Hiring Index	5.6				10.0		8.9	10.0	6.7		0.0	0.0	5.6		10.0			8.9	3.9	10.0		10.0
b) Rigidity of Hours Index	4.0				2.0		6.0	4.0	10.0		4.0	6.0	4.0		6.0			4.0	10.0	2.0		2.0
c) Difficulty of Firing Index	5.0				2.0		5.0	10.0	6.0		4.0	6.0	10.0		10.0			5.0	0.0	8.0		7.0
ii. Hiring Costs (% of salary)	5.0				5.3		8.0	8.0	6.1		6.9	6.8	8.4		8.0			6.9	6.6	7.7		6.9
iii. Firing Costs (weeks of wages)	9.1				1.4		5.2	7.7	9.1		8.4	5.6	9.3		5.8			5.8	8.5	4.9		9.1
iv. Use of conscripts to obtain military personnel	1.0	10.0			0.0		10.0	10.0	3.0	1.0	0.0	5.0	10.0	10.0	10.0			0.0	3.0	10.0		0.0
C. Business Regulations	7.7				7.5		7.5	7.6	7.9		6.9	8.3	7.6		7.0			6.4	8.2	7.2		6.9
i. Starting a Business (the ease of starting a business)	7.9				7.9		7.7	7.9	8.6		7.0	9.1	8.5		6.9			5.4	8.8	7.6		6.0
a) Number of Procedures	2.9				5.3		4.7	3.5	7.6		4.7	8.2	5.9		3.5			4.1	5.9	4.1		4.1
b) Duration (days)	8.8				8.4		8.3	8.4	7.8		6.0	9.6	8.4		6.9			7.8	9.4	7.4		7.0
c) Cost (% Income per capita)	9.8				9.3		9.7	10.0	9.2		9.0	9.9	10.0		9.5			9.8	9.9	9.7		8.3
d) Min. Capital (% Income per capita)	9.9				8.6		8.0	9.7	9.9		8.3	8.6	9.8		7.6			0.0	9.9	9.2		4.7
ii. Closing a Business (difficulty of closing a business)	7.4				7.2		7.3	7.3	7.1		6.7	7.5	6.7		7.2			7.3	7.6	6.9		7.8
a) Time (years)	6.8				6.0		5.9	6.0	6.3		2.1	8.5	3.1		7.5			6.1	9.1	5.1		7.3
b) Cost (% of estate)	9.6				7.2		8.9	10.0	7.2		8.9	7.7	9.6		7.2			8.9	9.2	6.1		9.1
c) Recovery rate (cents on the dollar)	6.0				8.3		7.0	5.9	8.0		9.1	6.2	7.3		6.9			6.9	4.4	9.4		6.9
Area 5 Score	5.8				4.9		7.4	8.2	7.6		6.0	6.5	7.8		7.0			5.8	6.5	6.7		6.3
Area 5 Rank	11				13		4	1	3		10	7	2		5			11	7	6		9