

The Global Costs of Opacity

*Measuring business and
investment risk worldwide*

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**Kurtzman
Group**

Dedicated to economic growth at the macro and micro levels





The Opacity Index:

Research Overview

2004

by

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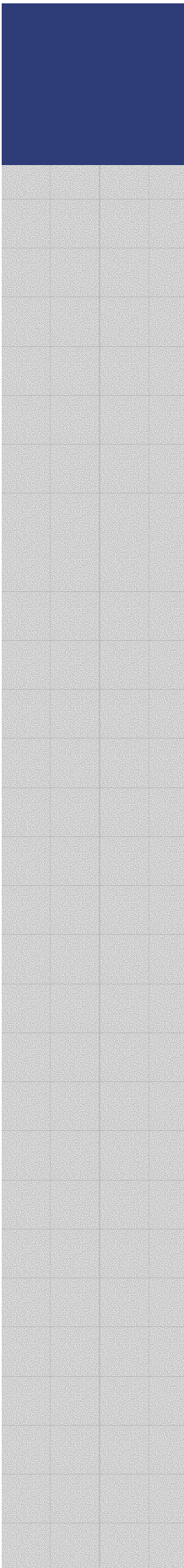
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Although large-scale risks garner media attention, it is the everyday, small-scale risks associated with the lack of transparency in countries' legal, economic, regulatory and governance structures that can confound global investment and commerce.

*The Opacity Index, first introduced in January 2001, identifies the causes and measures the **costs** and **effects** of this phenomenon.*

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The Global Costs of Opacity

Over the years, businesses have evolved a number of innovative ways to manage the risks associated with having global operations. They have developed sophisticated ways to insure their infrastructures and their operations and to hedge their currencies. They have learned how to distribute information resources globally using highly resilient computer networks with geographically dispersed backups. They have put in place sophisticated new internal controls systems to monitor performance and tease out fraud on a global basis. They have developed intricate taxonomies to enable different parts of the company to rate and communicate their risks in a consistent manner around the world. They have created a new global role—the chief risk officer—to watch over the company as a whole. And many boards of directors have made risk management one of their top priorities. But despite these initiatives, gaps remain.

Global companies face two distinct types of risks: Large-scale, low-frequency risks and small-scale, high-frequency risks. Although the large-scale risks—earthquakes, wars, *coup d'états*, and major acts of terrorism—are front-page news, the small-scale risks—fraudulent transactions, bribery, legal and

regulatory complexity and unenforceable contracts—represent the real costs to business. These risks interfere with commerce, add to costs, slow growth and make the future even more difficult to predict. They also deter investment.

“The key to any good investment relationship is clarity—the ability to see and even be in communication with what’s really going on. It’s the same whether it’s a company, a country or a region,” said Matt Feshbach, chief investment officer of MLF investments, a mid-sized hedge fund in Largo, Florida. “If the risk picture is unclear, capital is less likely to go where it’s needed.”

Since 2000, we have been annually studying a variety of countries, seeking to identify their degree of *opacity*—that is, the degree to which they lack clear, accurate, easily discernible and widely accepted practices governing the relationships among businesses, investors, and governments, which form the basis of most small scale, high frequency risks. Greater awareness of the risk factors that put the brakes on commerce can enable companies to make better portfolio and direct investment decisions regarding where to develop markets, locate productive resources or find the best outsource partner, and can also help governments understand how to make their countries more attractive locations for investment and to measure their progress.

Toward that end, we developed a methodology for projecting what aspects of a country’s economy carry the greatest risk. After talking with companies and financial and economic experts, we discovered that, in any country, small scale, high frequency risks fall into one of five broad causal categories (which form the acronym CLEAR): business and government *corruption*, an ineffective *legal system*, deleterious *economic policy*, inadequate *accounting and governance practices*, and detrimental *regulatory structures*.

By assessing and comparing the costs of those risks on a country-by-country basis, we create an overall Opacity Index, in which higher levels of opacity strongly correlate with slower growth and less foreign direct investment in all markets (except China, where the size of its market and labor force at-

tracts large-scale investment despite what appear to be very high levels of risk).

The Opacity Index

The Opacity Index draws upon 65 objective variables from 41 sources including the World Bank, International Monetary Funds, International Securities Services Association, International Country Risk Guide and individual country's regulators. Considerable effort has been made to ensure that the data are directly comparable across the 48 countries we studied. (Earlier attempts to do survey-based research proved less than optimal because many business leaders did not know enough about business practices in other countries to make meaningful comparisons with their own.) An array of data is compiled and ranked for each of the CLEAR factors.

To understand how the Index works and what it measures, consider how the research assesses legal systems. Data from a variety of publicly available sources—such as Global Competitiveness Report and the Index of Economic Freedom—are gathered to examine a country's overall legal environment and obtain a gauge of how effectively its legal system resolves business disputes and what protections it grants to businesses, investors and to other sources of capital. Factors such as whether bankruptcy procedures allow the continued operation of the business, whether shareholders have preemptive rights that can only be waived by a shareholder's vote, or the degree of judicial independence, strength of property rights or even the level of religious tension are evaluated and compiled to construct an overall score.

Similarly, we drew on a number of sources such as the World Bank Doing Business Database and the Global Competitiveness Report to measure and compare the economic risks that challenge business in various countries, including some traditional and non-traditional economic factors such as the influence of organized crime, the cost of terrorism and costs relating to bureaucratic "red tape" and non-transparent taxation systems. Together, these factors

summarize the economic costs of doing business in a country.

Our examination of regulation, particularly as related to the capital markets, measures how safe it is to provide capital to various countries. We sought data to answer two broad questions: Can investors in a given country get a full understanding of the companies in which they invest, and are there mechanisms for settling disputes that arise out of the investment process? In addition to these issues, we were concerned with how well the countries we studied conformed to the robust regulatory practices that are in use in countries like the United Kingdom and the United States, which have very large capital markets that are for the most part well run.

To create our assessment of corruption, we compiled data from existing indices, most notably Transparency International and the International Country Risk Guide. There is some overlap in the areas of business cost of corruption and that of terrorism which is accounted for in the category that focuses on economic factors. This is intentional, because firms often do not, perhaps cannot, clearly discern between these costs as they are often taken as a given when operating in a country. To better assess the opacity cost to businesses in these countries, corruption costs need to be taken into account individually and collectively with other opacity factors depending on the type of business.

Most of the data we compiled to measure the transparency in countries' accounting practices is binary: Do countries require an independent audit by an external auditor or not? Are there annual banking inspections? Are a country's accounting standards in accord with international standards? Comparing a country's data to various benchmarks and standards established around the world yields an overall understanding of whether the finances of companies in that country can be viewed with confidence.

Collecting, compiling and linearly rescaling data (from 0 to 100) in all the above-mentioned categories, we calculated five sub-indices—one for each

CLEAR factor—using simple averages. The final score is the simple average of the five sub-indices. (See Exhibit 1, “The Opacity Index.”) We believe these scores are a reliable reflection of each country’s everyday business risks. Further, each individual sub-index score allows companies to assess where they are most likely to get into trouble—corruption, the economy, accounting standards, and regulation—and whether they will have a chance for redress—legal—should a problem occur.

To put these risks into business terms, each final score is associated with an opacity risk premium (or discount), which is expressed as an interest rate equivalent. (For purposes of this study, the opacity risk premium/discount is calculated by taking the numerical difference in opacity between the subject country and the U.S. multiplied by 0.2213.) In practice this means that if a U.S. investor wants to do business in France, he needs to receive a return 3.53% greater than in the U.S. to offset the risk. If he wants to do business in China, he needs to receive a return that is 6.49% greater. If an investor wants to do business in Finland, she could actually receive a smaller rate of return than in the U.S. and still justify the investment.

Correlating Opacity With Other Indicators

To check the efficacy of the Opacity Index, we correlated it with various other indicators. For example, because opacity impedes the development and efficient functioning of a financial system — the markets as well as business processes and operations — one would expect to find highly opaque countries among the least developed — and *least able to develop* — countries. What’s more, opaque countries should be among the slower-growing countries in the developed world.

Income

To test these relationships, we looked for consistent differences in the average Opacity Index and individual scores among the four World Bank income groups (*See Exhibit 2, “Average Opacity Index and CLEAR Scores by World Bank Income Group”*.) Moving down the income groups, from high to lower, opacity increases in each component, except accounting because most of the lower income countries adapt more uniformly with the international accounting standards, which may be the by-product of high opacity in other components.

Economic Development and Foreign Investment

Our analysis shows that real gross domestic product (GDP) per capita—a common measure of economic development—is lower in countries with higher levels of opacity, whereas for richer countries the reverse is true. (*See Exhibit 3, “Opacity vs. Economic Development.”*) We estimate that for every one-point increase in opacity index, per capita income is lower by \$986. This suggests a strong association between prosperity and the lessened risk levels that come from transparent processes in each of the five areas we studied. It further suggests that opacity acts as a brake on the pace of economic development.

Opacity can also affect economic development indirectly by deterring foreign direct investments (FDI). Since it is the amalgamation of stable investment funds, advanced technology, efficient managerial skills, and easier access to the world market, FDI has a positive impact on economic growth and development. Opacity also has negative and significant impact on FDI a percentage of GDP. (*See Exhibit 4, “Opacity vs. Foreign Direct Investment.”*) In the majority of cases, most foreign direct investments go to countries with relatively transparent financial and economic systems. In the case of China, which has

high levels of opacity and high levels of economic development, the simple lure of China's "bigness" has tended to make it the recipient of greater levels of FDI than would otherwise be warranted. However, the results of this study indicate that if China were to become more transparent, the amount of FDI would likely increase.

Entrepreneurship and Access to Capital

Transparency in countries' financial and economic environments enhances the predictability of business conditions, which in turn promotes increased entrepreneurial activity. Opacity is not only a deterrent to economic development, it also decreases the ability of entrepreneurs to access capital. According to the World Bank Doing Business Database, regulatory and legal transparency is an important indicator of the cost of starting a business and the factor that could enhance or constrain business investment, productivity, and growth.

Opacity can starve a project of funding in many ways. By definition, opaque systems create information asymmetries between lenders and borrowers (that is, information is known to some, but not all, participants) and can add complexity and additional burden to lenders' expectations of return on investment. Opacity also increases the ranges of possible projected cash flows from risky projects, resulting in lower risk-adjusted expected present values. This decreasing of expected discounted returns may ultimately result in the rejection of some projects that would be successful yet appear to be poor investments given opaque conditions.

In addition, the Opacity Index would indicate that when fraud occurs in global companies, it begins in business units located in regions with higher levels of opacity. As a case in point, news reports indicate that the scandals surrounding Ahold, a Dutch company, began in high-opacity Argentina, while those of Parmalat, began in high-opacity Italy, but did not necessarily spread to

countries with lower levels of opacity which acts as a barrier to contagion of related crises. It becomes difficult for larger companies to impose reporting discipline in high opacity local business environments.

The annually produced Milken Institute Capital Access Index (CAI) ranks countries on the basis of entrepreneurs' access to capital and is based on variables measuring such market features as liquidity, interest rate volatility, and the risk of expropriation. To the extent that opacity adversely affects the development and efficiency of financial markets, one would expect the Opacity Index and Capital Access Index to be significantly and negatively correlated, as they clearly are. (*See Exhibit 5, "Opacity vs. Capital Access Index."*)

Lending and Equity Markets

A country's financial system is, in many ways, its most important intangible asset. The institutional capacity to generate and pool savings and invest them on projects and enterprises that will maximize a country's material well-being is critical. To the extent that the size of a country's financial system is closely related to its entrepreneurs' ability to access capital, one would further expect to find a significantly negative correlation between opacity and the depth and breadth of the financial system as measured by the number, types, and capitalization of financial institutions, capital markets, and financial instruments and their liquidity. And this clearly is the case.

Our analysis shows that opacity correlates negatively with the size of a country's banking system relative to its GDP. (*See Exhibit 6, "Opacity Index vs. Bank Assets."*) Opacity increases asymmetric information problems for banks, raising agency costs and perhaps the likelihood and costs of debtor defaults. In addition, the Opacity Index has a statistically significant and negative correlation with stock market capitalization and trading volume relative to GDP. (*See Exhibit 7, "Opacity*

vs. Size of Equity Market” and Exhibit 8, “Opacity vs. Trading of Equity Market.”) Opacity can lead to wider bid-offer spreads and hence less liquid and less efficient financial markets. Additionally, it can mask the underlying fundamentals of investments and thereby make investment in an opaque country less attractive. This in turn generates an opacity-related risk premium for that country’s firms when they raise capital.

Since financial institutions and financial markets are critical to the infrastructure of investment flows within countries and their ability to build a broad-based business community, these findings strongly suggest that increased transparency of a country’s critical financial factors would be a stimulus to its firm creation, industrial expansion, and economic growth.

Clearly, countries that ignore their Opacity Index scores could face lagging rates of growth over the long haul. (*See Exhibit 9, “The Negative Impact of Opacity.”*) One only has to consider the difference between the development of Finland and Russia after the end of the Cold War. Both countries were poor, but had invested heavily in education, and both had abundant natural resources. Russian capitalism developed with a poorly functioning regulatory structure for its businesses, few real legal protections, a vague set of laws governing such things as property rights and very high levels of corruption and crime. Finland, on the other hand, emphasized the creation of strong institutions, regulatory structures and laws. Corruption there is almost non-existent. The result? Finland now has one of the most vibrant economies in the world, ranked at the top of the 2003-2004 World Economic Forum’s Competitiveness Index. Russia, by contrast, lies at the bottom of the Index, at 58th.

The Firm-Level View

Opacity's correlation with slow growth, lackluster foreign direct investment, flagging equity markets and a host of other woes has obvious implications for global companies. Managers need to make decisions based on more than the size of a country's market and the price of its labour. They need to take into account how its economy works. Businesses that do not pay attention to a country's level of opacity, could find that they are making long-term decisions based on unrealistic estimates of risk and return.

Businesses must understand – in very quantifiable terms – the cost of doing business in high-opacity countries. Doing business in Mexico, for example, which has an opacity score of 44, requires a return of 5.01% above the U.S. rate of return in order to offset a company's risk. Doing business in China, with a score of 51, requires a premium of 6.49% to offset its risk. What this means to managers is that in some instances, China, even with its low wage rates, may actually be a less attractive place to do business than Mexico when the opacity risks are factored in.

A look at the individual CLEAR factors can inform even finer-grained managerial decisions since, even for countries with the same overall Opacity Index rating, the causes of opacity might be quite different. If managers have a choice of where to locate a regional headquarters, for example, they might choose a country that scores higher on the legal and economic sub-indices. If they are looking for a place to build a plant, they may care more about the corruption sub-index. If they are looking at a joint venture with another company, the legal sub-index will indicate those locales in which the provisions of a joint-venture contract will be best enforced.

This is not to suggest that businesses should avoid high-opacity countries. Indeed, in some areas of commerce such as mineral extraction and oil

production, that would be difficult, since many of the largest producers of raw materials and oil have high opacity scores. Instead, businesses can use the Index to prudently measure their risks and to create mechanisms to protect themselves against those risks.

In the final analysis the Opacity Index illustrates why it is in everyone's interest for companies and countries to work together to bring down opacity scores. For businesses, it is critical in order to become fully global in a prudent way. For countries, it is necessary in order to attract their fair share of inbound investment for growth and development.

A Country-By-Country Ranking of Opacity: The Opacity Index

To create a country-by-country ranking of opacity — the degree to which countries lack clear, accurate, easily discernable and widely accepted practices governing the relationships among businesses, investors, and governments — data was compiled from 70 different sources of which about 40 are directly comparable across 50 countries. In Exhibit 1, which follows, each CLEAR component of opacity — *corruption* (COR), efficacy of the *legal system* (LEG), deleterious *economic policy* (ENF), inadequate *accounting and governance practices* (ACC), and detrimental *regulatory structures* (REG) — is rated separately and the ratings contribute to an overall opacity rating. (The rightmost column indicates the interest rate premium or discount derived from doing business in a given country as compared to doing business in the U.S.)

Exhibit 1

The Opacity Index

Country	Category					OPA	Opacity Premium/ Discount (%)
	COR	LEG	ENF	ACC	REG		
Finland	3	11	23	17	9	13	-1.83
United Kingdom	20	3	25	33	13	19	-0.44
Denmark	6	15	21	33	19	19	-0.44
Sweden	8	24	21	25	19	19	-0.31
Hong Kong	26	12	14	33	15	20	-0.21
USA	28	19	27	20	10	21	0.00
Australia	19	16	26	33	10	21	0.00
Switzerland	20	27	20	25	21	23	0.40
Austria	21	11	32	33	17	23	0.42
Belgium	28	25	30	17	14	23	0.42
Canada	26	17	37	20	16	23	0.48
Singapore	15	19	25	50	10	24	0.65
Netherlands	16	21	22	38	23	24	0.67
Germany	28	14	33	17	32	25	0.86
Ireland	33	19	29	38	9	26	1.03
Japan	38	24	31	22	22	28	1.51
Chile	41	24	30	20	27	29	1.71
Israel	33	30	44	20	25	30	2.09
Taiwan	47	33	20	40	28	34	2.83
S. Africa	55	34	28	33	18	34	2.85
Spain	39	25	32	50	23	34	2.86
Malaysia	55	35	28	30	26	35	3.08
Thailand	72	33	29	20	21	35	3.11
Portugal	37	26	31	50	32	35	3.22
Hungary	51	31	26	50	24	36	3.40
Korea	61	35	22	30	37	37	3.52
France	39	47	33	33	32	37	3.53
Brazil	47	48	32	40	35	40	4.29
Poland	63	35	47	40	19	41	4.43
Greece	58	30	36	50	30	41	4.43
Czech Rep	61	35	32	44	35	41	4.56
Ecuador	64	60	34	25	29	42	4.78
Colombia	57	61	45	29	21	43	4.81
Italy	52	32	45	63	24	43	4.94
Turkey	67	41	27	44	36	43	4.95
Mexico	65	60	35	33	25	44	5.01
Argentina	65	64	33	30	27	44	5.06
Pakistan	75	49	47	33	22	45	5.35
Saudi Arabia	61	34	32	33	69	46	5.52
Russia	78	44	39	40	31	46	5.64
Egypt	71	37	39	40	51	48	5.91
India	74	44	49	30	46	48	6.09
Nigeria	80	65	48	0	50	49	6.12
China	74	39	39	56	43	50	6.49
Philippines	75	56	52	33	36	50	6.51
Venezuela	75	68	49	30	30	51	6.56
Lebanon	83	60	65	44	42	59	8.47
Indonesia	82	54	90	22	49	59	8.54

Exhibit 2

Average Opacity Index and CLEAR Scores by World Bank Income Group

When the countries studied are broken down into the four World Bank income groups, group opacity increases for each component as group income decreases. The sole exception is accounting, because most lower-income countries adopt international accounting standards, possibly to counter high opacity in other components.

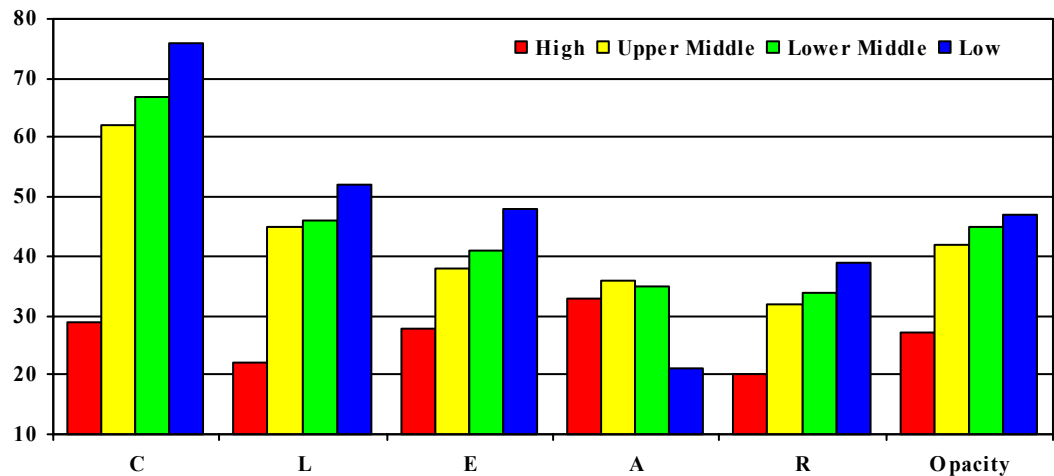


Exhibit 3

Opacity vs. Economic Development

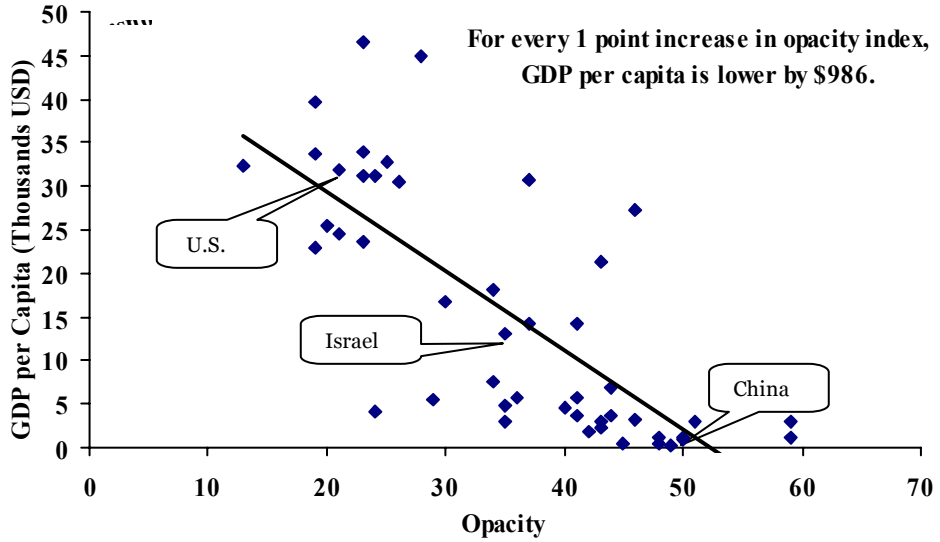


Exhibit 4

Opacity vs. Foreign Direct Investment

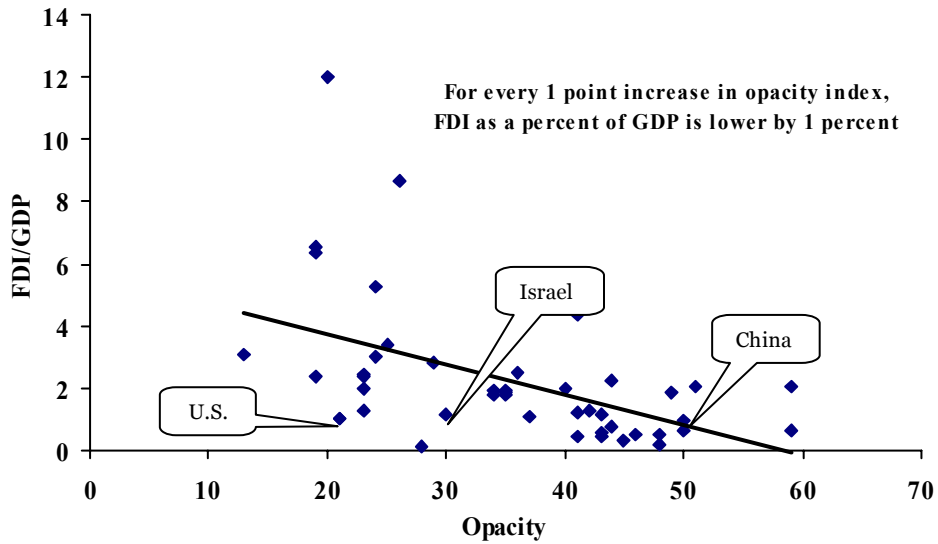


Exhibit 5

Opacity vs. Capital Access Index

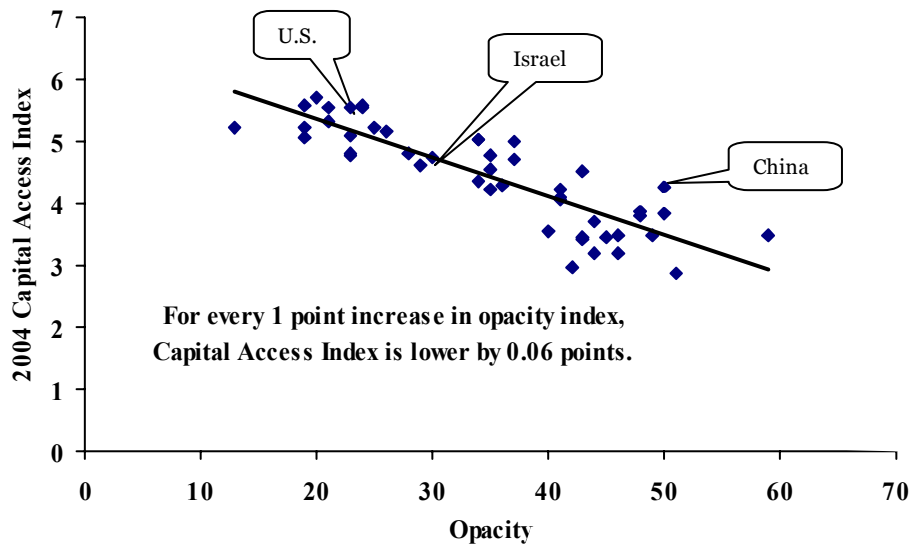


Exhibit 6

Opacity Index vs. Bank Assets

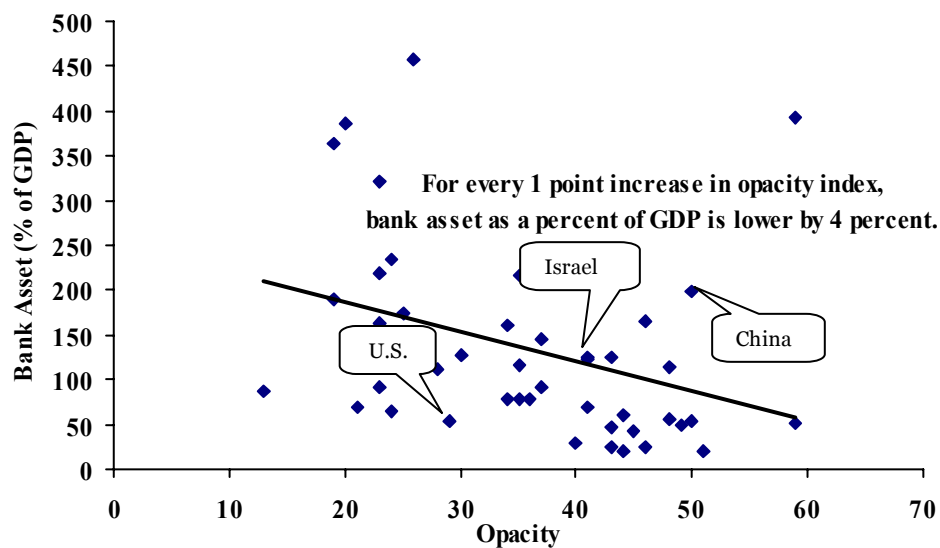


Exhibit 7

Opacity vs. Size of Equity Market

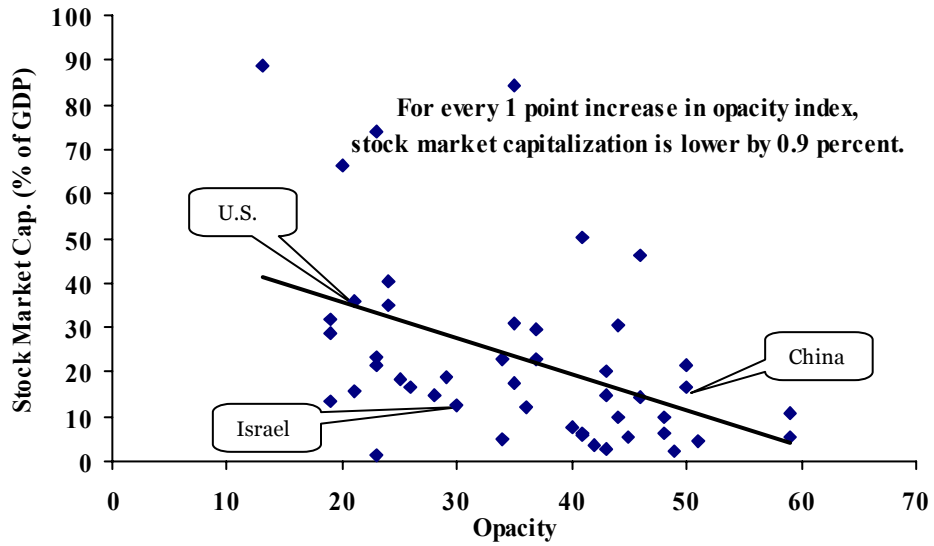


Exhibit 8

Opacity vs. Trading of Equity Market

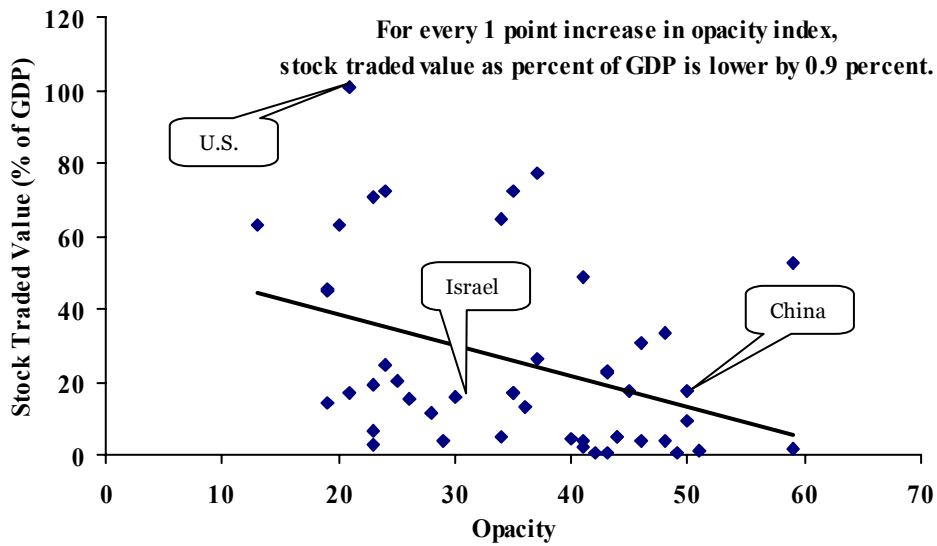


Exhibit 9

The Negative Impact of Opacity

Based upon simple regression analysis, every one-point increase in a country's Opacity Index correlates to a:

- \$986 decrease in its per capita income
- 1% decrease in its net foreign direct investment as a percentage of GDP
- 0.06-point decrease in its Capital Access Index
- 4% decrease in its bank assets as a percentage of GDP
- 0.9% decrease in its stock market capitalization as a percentage of GDP
- 0.9% decrease in its stock market traded value as a percentage of GDP
- 57 basis-point increase in its average borrowing interest rate
- 0.46% increase in its inflation rate

Endnotes

The Opacity Index was initially launched in 2000 by PricewaterhouseCoopers. The objective was to look beyond corruption alone, to examine other aspects of business practices that raised the costs of business and capital and inhibit economic growth. By the first quarter of 2001, the first opacity index — based upon survey responses of corporate leaders, banking executives, equity analysts, and in-country staff of PricewaterhouseCoopers — was compiled and released to the public.

Sources

For more detail, see: <http://www.opacity-index.com/> and <http://www.kurtzmangroup.com/>.

For detail on Transparency International Corruption Perception Index, see <http://www.transparency.org/cpi/index.html>.

International Country Risk Guide is a publication of PRS group. For more information, see <http://www.prsgroup.com/>.

For a complete list of questions addressed and the types and sources of data compiled in each CLEAR category, see <http://www.milkeninstitute.org/opacity.htm>.

The opacity premium or discount calculation is based on estimated parameters of augmented fisher equation. For technical detail see <http://www.milkeninstitute.org/opacity.htm>

Per capita income in our sample countries ranges from \$46,553 to \$248. Average income of the sample is \$15,278.

In fact variables relating to the size, liquidity and degree of development of a country's capital markets are used, in part, to calculate its Capital Access Index score.

About the Kurtzman Group

The Kurtzman Group is a consulting and advisory firm dedicated to helping companies measurably improve their performance and visibility in the marketplace by harnessing the power of thought leadership, innovation and great ideas. Founded in 1995 by Joel Kurtzman, the Kurtzman Group works closely with clients to evolve tailored business strategies with clear and achievable objectives. Clients have included the largest and most influential companies in the world across a spectrum of industries.

Joel Kurtzman is a Senior Advisor to PriceWaterhouseCoopers, and was that firm's Global Lead Partner for Thought Leadership and Innovation. Prior to that, Mr. Kurtzman was a partner in a specialized private equity investment firm, Knowledge Universe. As president of his own advisory firm he was an alliance partner with Booz-Allen & Hamilton, for whom he created the award-winning business publication, *Strategy & Business*. Mr. Kurtzman is the former Editor of the *Harvard Business Review* and was business editor and columnist for six years at *The New York Times*, specializing in international economics, where he covered the break up of the Soviet Union. He was a columnist for *Fortune* magazine.

Earlier in his career, Mr. Kurtzman was an international economist at the United Nations and World Bank where he was deputy director of the UN's Project on the Future. His economic modeling teams were the first to warn of the impending Latin America debt crisis and produced a library of 17 volumes of books on the global economy. He was also Deputy Secretary to the Committee on Development Planning. While at the UN, Mr. Kurtzman was involved as a negotiator between India and the Union Carbide Corporation over the Bhopal disaster for which he was awarded India's Indira Gandhi Prize.

Mr. Kurtzman is the author or editor of 19 books and hundreds of articles. He is a member of the editorial board of *MIT's Sloan Management Review*. His most recent book is *MBA in a Box*.