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2009 OPACITY INDEX:
Measuring Global Risks



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Joel Kurtzman and Glenn Yago

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2009 Update

The previous edition of the Opacity Index (released in April 2008) noted an increasing level of economic and financial risk across all regions of the world—and indeed, in the intervening year, most countries analyzed in the Index have been negatively affected by the global financial crisis.

The latest update¹ finds the United States, whose financial and housing sectors have been the epicenter of the current turmoil, continuing its slow descent in the rankings, a trend that has been evident since the Opacity Index was first conceived in 1999 and introduced in 2000. The United States is now ranked 13th, maintaining last year's position but posting a significant drop from the 4th-place position it held in 2001. By contrast, the four top-rated countries in this year's update—Finland, Hong Kong, Australia, and Singapore—were all among last year's top four, although they have moved relative to one another within that top tier.

The downward movement of the United States is worrisome, given its central role in the world's financial markets. However, many of the economic and financial-institution reforms so far outlined in Washington's crisis response are likely to have the same effect as “opacity reforms,” though they may not be labeled as such. If these changes are implemented correctly, it is likely that the United States could see its standing rise in future editions of the Index.

Along those lines, this update of the Index continues to record progress in a broad range of countries around the world as they continue implementing international accounting standards as a replacement for a variety of homegrown—and often faulty—accounting standards.

The Opacity Index is a measure of five components that may be thought of as “negative social capital.” These are **C**orruption, **L**egal system inadequacies, economic **E**nforcement policies, **A**ccounting standards and corporate governance, and **R**egulation. Together, these five factors spell **CLEAR**. A high score on the Index indicates higher levels of opacity in each of these areas.

Opacity, as defined in the book *Global Edge: Using the Opacity Index to Manage the Risks of Cross-Border Business*, is the “lack of clear, accurate, formal, clear-cut practices in the broad arena where business, finance, and government meet.”² It is a broad measure of the effectiveness of a country's economic and financial institutions, as well as its overall risk. Unlike other analyses that examine country risks by summarizing the expert opinion of academics, analysts, former governmental officials, and the media, the Opacity Index is based entirely on empirical observations.

1. The Opacity Index is updated in two ways: Every five years, all country data is updated. This represents as many as seventy variable inputs per country. The next complete update will be conducted in 2011. In addition, each year the authors conduct a “light update,” which encompasses only fast-changing data. While laws, regulations, and many procedures within countries change slowly, other reforms, such as shifts in accounting standards, change much more quickly. This 2009 edition is a light update, capturing approximately ten to twenty changes per country.

2. Joel Kurtzman and Glenn Yago, *Global Edge: Using the Opacity Index to Manage the Risks of Cross-Border Business* (Boston: Harvard Business School Press, 2007).



To determine and compare relative differences in legal institutions, for example, one data input used in the Index is the actual number of procedures required to have a case heard in court. On the enforcement side, the Index assesses whether creditors have rights in bankruptcy cases, and whether property rights are well defined. When examining accounting opacity, the Index measures whether the country in question has transitioned to international accounting standards and, if so, how well it has implemented those standards. These examples represent a tiny share of all of the data inputs used in preparing the Index.

Facts like those just mentioned can be extremely useful from a business and policy perspective. Understanding how one country compares with another along the five CLEAR dimensions is a useful tool for businesses as they make decisions, compute future costs, and forecast risks. It is also useful for companies that wish to invest in high-risk areas but need to develop contingency plans in order to do so.

From a governmental perspective, the Index provides useful information for nations that wish to make changes. Most indicators of country risk focus on political factors, but the Opacity Index, by contrast, focuses on business and economic risks; actions taken on that level can change the relative attractiveness of a given country to outside investment. Over the years, research has shown that lowering opacity levels also lowers the cost of doing business. Decreasing corruption, for example, has the same effect as lowering business taxes. A decreasing opacity level is highly correlated with increased competitiveness.³

In addition, the fact-based approach employed by the Opacity Index allows for a consistent method of comparing countries. This is different from the conventional method of conducting country risk assessments, in which experts who specialize in one country or region do not have sufficiently broad knowledge to compare one country or region with another.

The ability to compare nations is essential for business and government. Knowing how risks in country A differ from those in country B can be helpful for firms making direct and portfolio investment decisions. For government leaders, knowing how their country compares to another with regard to Opacity Index risk factors makes it easier to tailor policies that will make their country a more appealing place to do business. In this way, the Index is a useful tool for creating “positive rivalries,” and for helping nations understand that they can become more competitive by becoming more transparent and by making their institutions more effective. In addition, the Opacity Index gives government leaders the ability to measure progress against other countries (and their own performance) on a year-by-year basis.

3. Peter K. Cornelius, Thomas Hall, and Joel Kurtzman, “Opacity, Foreign Direct Investment, and Economic Growth,” in *The Latin American Competitiveness Report 2001-2002*, World Economic Forum (New York: Oxford University Press, 2002).



Table 1. Opacity Index 2009

Country	2009					2009 Opacity score	2008 Opacity score	2009 country rank	2007-2008 country rank
	C	L	E	A	R				
Finland	4	11	21	1	6	9	9	1 (-)	1
Hong Kong	21	10	14	1	12	12	12	2 (-)	2
Australia	16	19	29	1	5	14	15	3 (↑)	4
Singapore	14	15	19	14	5	14	14	3 (-)	3
Sweden	10	21	29	2	8	14	15	3 (↑)	4
Denmark	7	18	26	11	16	15	16	6 (-)	6
Ireland	29	15	25	1	5	15	16	6 (-)	6
Austria	15	10	29	10	14	16	16	8 (↓)	6
Germany	16	12	31	10	18	17	17	9 (-)	9
United Kingdom	24	9	35	11	10	18	17	10 (↓)	9
Belgium	30	19	34	2	11	19	21	11 (-)	11
Canada	14	12	30	32	14	20	22	12 (-)	12
Switzerland	14	21	25	36	17	22	24	13 (↑)	14
United States	31	21	30	20	7	22	23	13 (-)	13
France	22	37	34	2	22	23	24	15 (↓)	14
Netherlands	13	24	31	32	19	24	25	16 (-)	16
South Africa	46	27	34	1	12	24	26	16 (↑)	19
Chile	28	24	31	26	17	25	26	18 (↑)	19
Japan	36	20	31	21	17	25	25	18 (↓)	16
Portugal	32	29	31	16	15	25	25	18 (↓)	16
Spain	33	26	40	18	12	26	27	21 (-)	21
Israel	38	31	37	23	17	29	30	22 (-)	22
Czech Rep	49	40	36	3	19	29	32	22 (↑)	25
South Korea	42	28	29	30	18	29	31	22 (↑)	24
Hungary	51	34	37	13	12	30	30	25 (↓)	22
Greece	53	34	39	12	15	31	32	26 (↓)	25
Malaysia	47	29	35	30	18	32	32	27 (↓)	25
Poland	52	34	45	13	17	32	35	27 (↑)	29
Taiwan, China	48	32	32	30	19	32	34	27 (↑)	28
Egypt	63	35	42	3	27	34	37	30 (↑)	31
Italy	50	38	52	22	16	36	38	31 (↑)	34
Turkey	51	41	45	13	32	36	36	31 (↓)	30
Mexico	60	47	43	21	12	37	37	33 (↓)	31
Thailand	61	42	37	21	23	37	37	33 (↓)	31
Indonesia	49	46	46	31	28	40	41	35 (-)	35
Russia	68	45	42	26	21	40	41	35 (-)	35
India	56	45	43	29	33	41	44	37 (↑)	40
Argentina	63	53	47	32	17	42	43	38 (-)	38
China	57	40	40	40	33	42	45	38 (↑)	41
Ecuador	63	57	43	22	24	42	42	38 (↓)	37
Pakistan	65	46	48	31	19	42	43	38 (-)	38
Brazil	64	49	47	36	20	43	46	42 (-)	42
Colombia	57	49	53	44	15	44	48	43 (↑)	45
Saudi Arabia	63	40	38	62	20	45	47	44 (↓)	43
Lebanon	77	63	38	20	28	45	50	44 (↑)	47
Philippines	66	50	44	39	28	45	47	44 (↓)	43
Venezuela	76	72	60	5	25	48	48	47 (↓)	45
Nigeria	69	64	44	63	37	55	57	48 (-)	48



Today's Economic Environment

The United States has recently been rocked by several large scandals that negatively affected the markets and investor confidence. These include the more than \$50 billion Ponzi scheme of Bernard L. Madoff Investment Securities, the alleged \$9.2 billion swindle carried out by the Stanford Group, and other investment frauds and schemes now collectively termed “mini-Madoffs.” All of these problems sent fear through markets that were already traumatized by the global financial crisis.

It is important to point out that each of these alleged activities was already illegal in the United States within its current framework of laws, and each carried severe penalties. The problem, therefore, was not the need to write new rules but the need to enforce the ones already on the books. In the course of their normal activities, illegal actions associated with these alleged scandals should have been turned up by accountants, outside auditors, regulators, banks, and other investors. Indeed, in the Madoff case, warnings and complaints were sent to the U.S. Securities and Exchange Commission, the chief market regulator, for more than a decade.

Clearly, these episodes are not the norm. However, the inability of the legal, oversight, and enforcement structures within the United States to catch these problems early on represents a significant opacity problem in a market system once believed to be the gold standard.

In addition, the United States was also responsible for a great many—but not all—of the lapses that led to the global financial crisis, beginning with the inability of U.S. rating agencies to adequately assess risks. These agencies appear to have overlooked some fundamental problems in securitization pools that would have otherwise required those vehicles to be rated below investment grade. While these agencies are private companies, they are generally viewed as providing a service whose veracity is vital to the orderly functioning of the world's capital markets.

These lapses, which were pervasive, served to do nothing less than institutionalize opacity in the financial sector—that is, they created situations that were opaque to investors. As a result, capital was allocated to vehicles that many investors might have otherwise shunned with higher levels of financial transparency. In this way, the rating agencies, rather than shedding light on risks associated with investing in securitized mortgage portfolios and related products, provided only a false and temporary sense of confidence for investors. Had investors known that the truth about many of the securitization products sold in the market, they would have acted differently, especially with regard to how they priced the products they bought. That change alone—*correctly pricing the risks associated with the subprime mortgage market*—could have gone a long way toward preventing much of the ensuing financial disaster.



Rules vs. Behaviors

There is often a large discrepancy between the laws, rules, and procedures on a country's books and the way they are actually carried out. This discrepancy is frequently the subject of whispers, but is rarely measured. For example, countries may have official rules about the number of steps it takes to get a permit, even though those procedures are rarely followed. As one investor in a medium-developed, resource-rich country recently reported, "If you follow the law, you will never get the government to approve your requests. The only way to get things moving is to bribe the officials. It's expensive, but it works. It's what's expected."

Putting aside arguments about culture, ethics, and even morality, behaviors like the one just cited—as opposed to following the rules on that country's books—create a people-based system instead of a rules-based system. A people-based system is expensive, inefficient, and time-consuming, while the added costs and risks of proffering bribes yields no increase in services. It only gets the bribe-maker a good or service that he or she already paid for with taxes—and it does this on a rather unpredictable basis. If an individual's relationship with the government changes with the caprice of an individual governmental official, there is no guarantee the service will be provided. Nor will there be any recourse should the service be withheld after the bribe is made. As a result, bribes impede commerce in much the same way that red tape and higher taxes impede commerce.

In some countries, opacity "taxes" (the added cost burden that arises from the entire set of CLEAR factors) can be very high. In the Philippines, costs associated with opacity act like a 66 percent increase in the corporate tax rate.⁴ In Russia, the opacity tax is estimated to act like a 41 percent hidden addition to the corporate tax rate.⁵

The added cost to business due to opacity is not limited to corruption. There are other costs as well. For example, the inability to resolve lawsuits in a timely fashion can be costly, as can the inability to collect on loans made prior to a bankruptcy. Uncertainty regarding property rights not only adds to costs but allows capital to be trapped, as Hernando de Soto has pointed out.⁶ There are many other costs associated with high levels of opacity, all of which act as a drag on economic growth.

4. David T. Johnson, "Bureaucratic Corruption in Japan," working paper 76, Japan Policy Research Institute, Encinitas, CA, 2001.

5. Joel Kurtzman, Glenn Yago, and Triphon Phumiwasana, "The Global Costs of Opacity," *MIT Sloan Management Review*, Fall 2004.

6. Hernando de Soto, *The Mystery of Capital: Why Capitalism Triumphs in the West and Fails Everywhere Else* (New York: Basic Books, 2000).

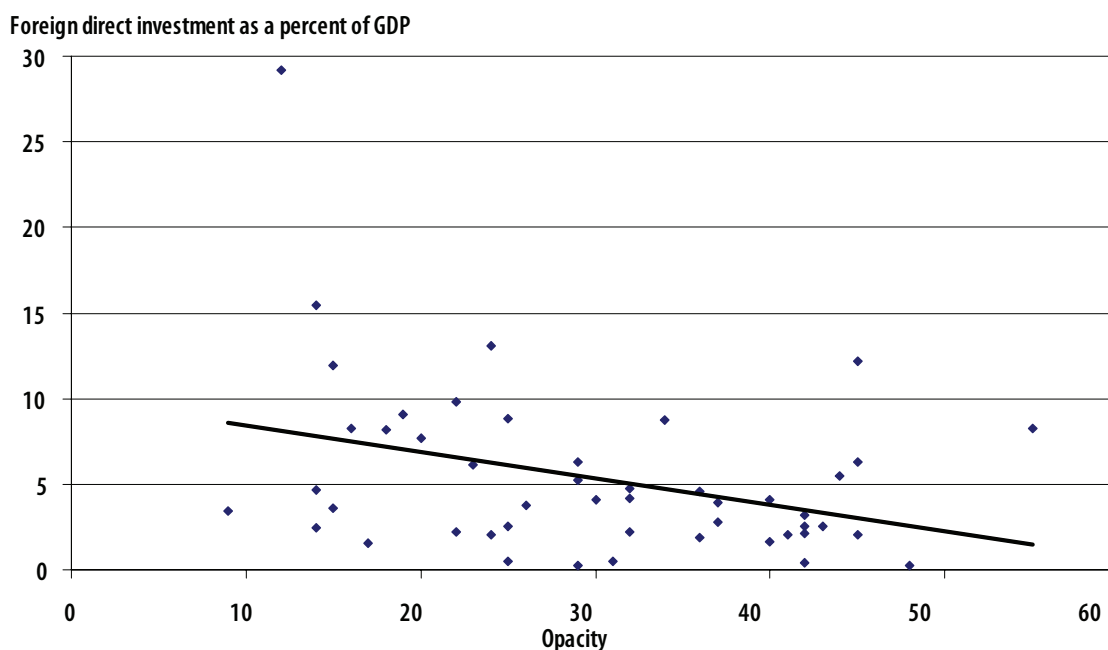


Opacity and Foreign Direct Investment

Higher costs associated with high levels of opacity function as a drag on the economies of the countries that score poorly on the Index. Slower GDP growth is correlated with higher opacity levels, as are other factors, including a reduced ability to attract foreign direct investment (FDI). The relationship between opacity and FDI is particularly important because FDI plays the same role in emerging market countries that venture capital plays in developed countries. Not only does it create employment, but it also accelerates skills and technology transfer. High-opacity countries lose out on this type of investment.

Figure 1. Opacity vs. foreign direct investment

For every 1-point increase in opacity, foreign direct investment as a percent of GDP decreased by 0.15 percentage point



While the relationship between high levels of opacity and diminished FDI is a tight one, there is a noteworthy exception. China, a high-opacity country, has received a disproportionate amount of FDI, despite its risks.

The reason for the “Chinese exception” is twofold. First, China is simply big—and “bigness” overcomes many problems, since along with size comes the opportunity (though not the certainty) to create large enough returns to offset many of the risks. The sheer size of China’s markets has enabled investors to make money despite high levels of opacity. Second, the Chinese government has skillfully kept domestic interest rates low in many areas of the economy.⁷ Although artificially low interest rates penalize savers and retired people living on fixed incomes, they do stimulate sectors such as real estate and housing. In many cases, however, while artificially low interest

7. Kui-Wai Li, *Financial Repression and Economic Reform in China* (Santa Barbara: Praeger Publishers, 1994).



rates increase the appeal of investing in a country, they also lead to the overstimulation of certain areas of the economy. Artificially low interest rates are not a uniquely Chinese problem. Low interest rates in Japan in the 1970s and '80s contributed to price inflation in that country's real estate sector. More recently, low interest rate policies in the United States produced the same result by increasing the attractiveness of residential real estate while masking its risks. This problem, called "financial repression," was identified decades ago by John Maynard Keynes.

As a result of these two factors, China's high level of opacity has not dissuaded direct and portfolio investors, nor should it. The objective of opacity research is not to dissuade people from investing. It is to help them understand their risks so they invest with prudence while reminding policymakers that if they were to achieve higher levels of transparency and institutional efficiency, their overall rates of growth, stability, and competitiveness would increase.

Opacity and Slower Growth

Opacity constrains overall growth rates due to the frictional effects that result from poorly functioning institutions. But more than simply acting as a brake on growth and development, opacity also depresses per capita income by diverting capital from more productive uses. The braking effect of opacity can be calculated generally and then applied to each country under study.

In the current update of the Opacity Index, each point of opacity translates into a loss of \$1,367 in per capita GDP. During recessionary times, this is certainly crucial. It is also a big issue in countries like Mexico, where opacity is high and the economy, while growing, is doing so at a rate that is far less than its potential. For example, if Mexico were *only* as transparent as the United States, so that its institutions performed as well as those of its northern neighbor, Mexico's per capital GDP would increase by almost \$20,000 a year, to between \$28,000 and \$34,000 a year.

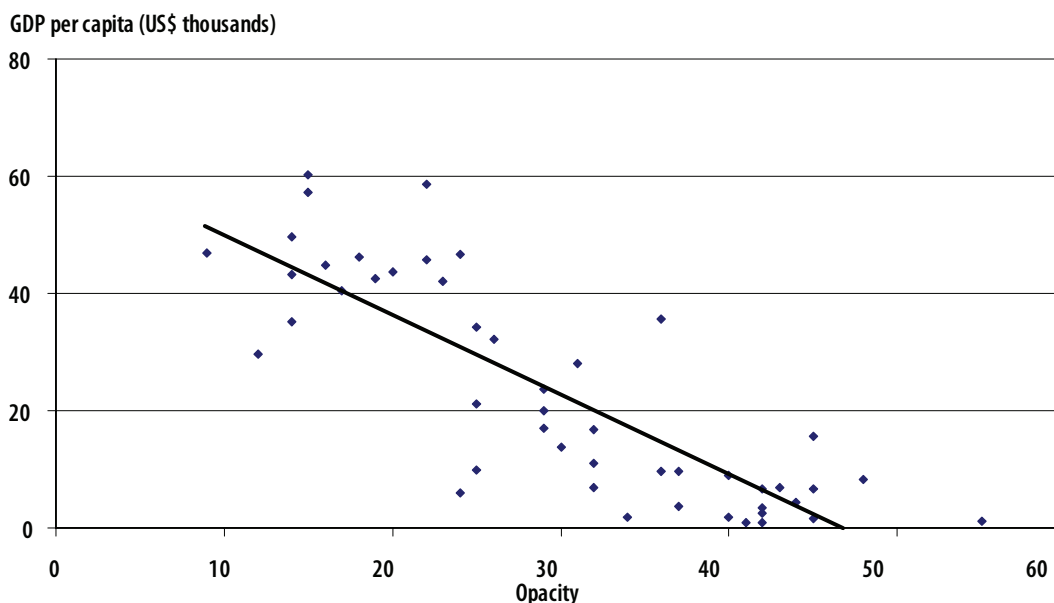
While this appears to be a big increase—and it is—it shows the difference that institutions make in the lives of citizens. And, while we recognize that these numbers are simply thoughtful, fact-based approximations, given the nature of the underlying data, they do signal the extent to which opacity is a factor undermining the lives of normal people.

In addition to the points just listed, if opacity levels were lower in emerging market countries, it is likely that more wealth would be in the hands of more people, creating a more egalitarian distribution of income and wealth. For the fast-growing BRIC countries of Brazil, Russia, India, and China, all of which are suffering from the current economic downturn, a more egalitarian distribution of wealth would act as a safety valve, since risks would also be distributed more widely. Faster growth rates, higher levels of foreign direct investment, and a more equal distribution of income and wealth would help these emerging market countries perform during the slowdown.



Figure 2. Opacity vs. GDP per capita

For every 1-point increase in opacity, GDP per capita decreased by US\$1,367



Opacity and Access to Capital

The ramifications of high levels of opacity, outlined above, also stifle entrepreneurship. The types of institutional friction associated with opacity are tightly linked to problems that limit access to capital. Since access to capital is necessary for entrepreneurship to flourish, a shift in policies to create better opacity results is likely to result in higher levels of entrepreneurship.

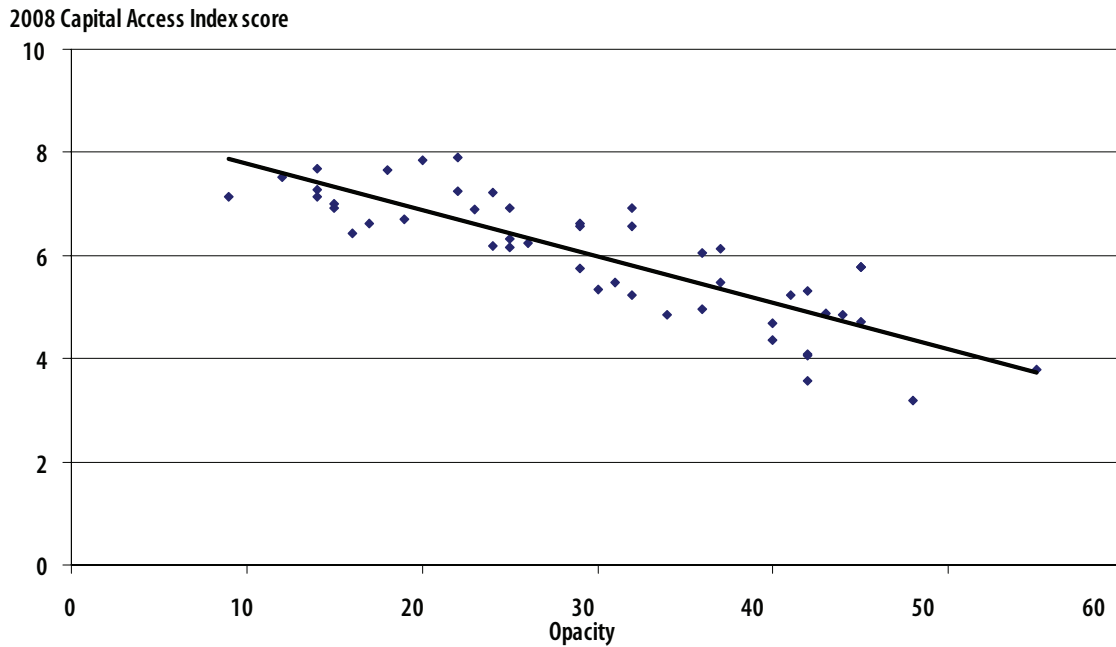
The results of such policies would be highly beneficial to all countries, but especially to emerging market nations. This results from the fact that young companies are responsible for creating most of the world’s jobs.

Old, established companies—even multinationals—rarely contribute to job creation once they mature. This is borne out by the real-world relationship between access to capital and job creation in the United States, Canada, the Nordic countries, and Israel, all of which have high levels of entrepreneurship and relatively good access to capital. These countries have had high rates of job creation relative to other countries in their economic groups. Greater transparency and better-functioning institutions would bring these same benefits to developed and emerging countries alike.



Figure 3. Opacity vs. the Milken Institute Capital Access Index score

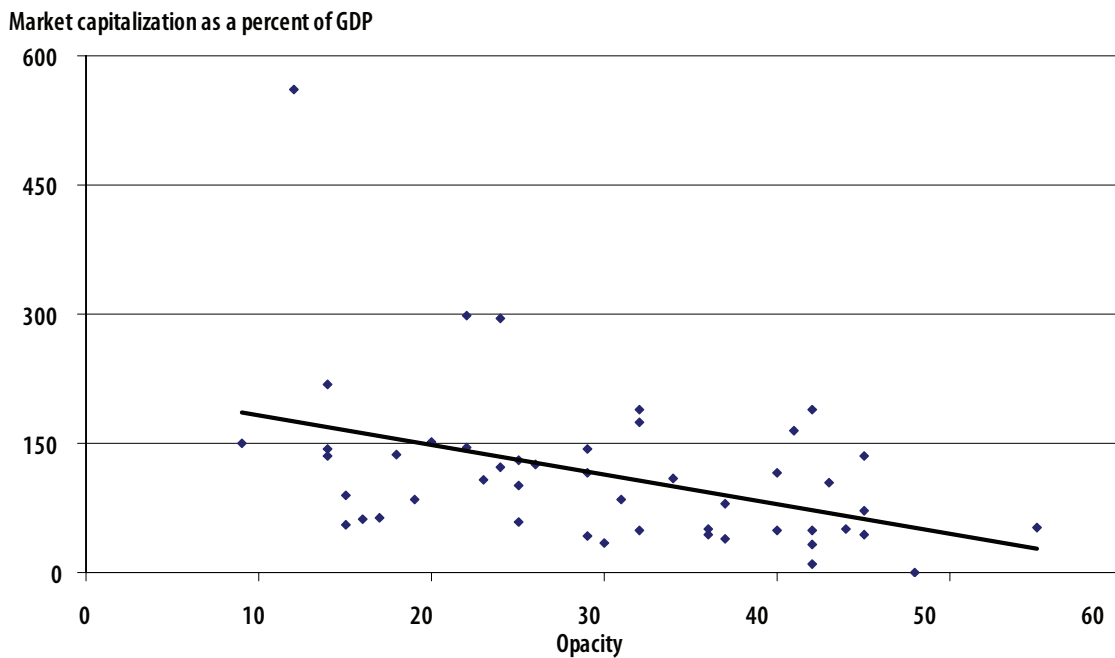
For every 1-point increase in opacity, the Capital Access Index score decreased by 0.1 percentage point



Opacity also is highly correlated with market capitalization, a source of capital for entrepreneurs.

Figure 4. Opacity vs. equity market capitalization

For every 1-point increase in opacity, market capitalization as a percent of GDP decreased by 3.4 percentage points

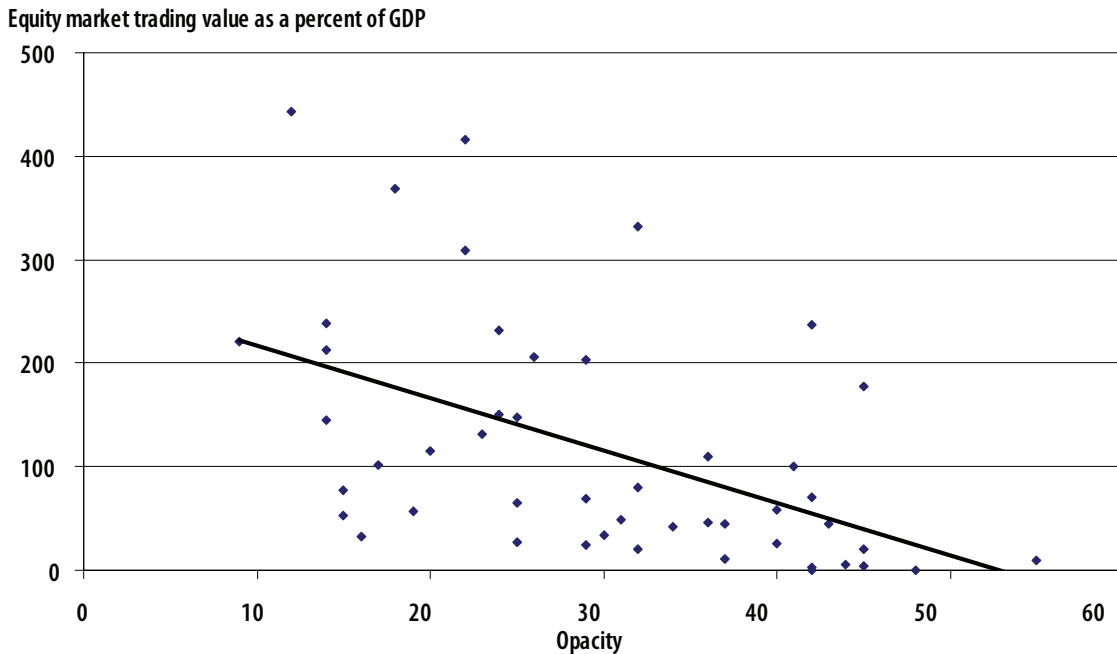




Opacity is a component that limits the size, depth, and trading volumes of the equity markets in countries around the world.

Figure 5. Opacity vs. trading of equity market

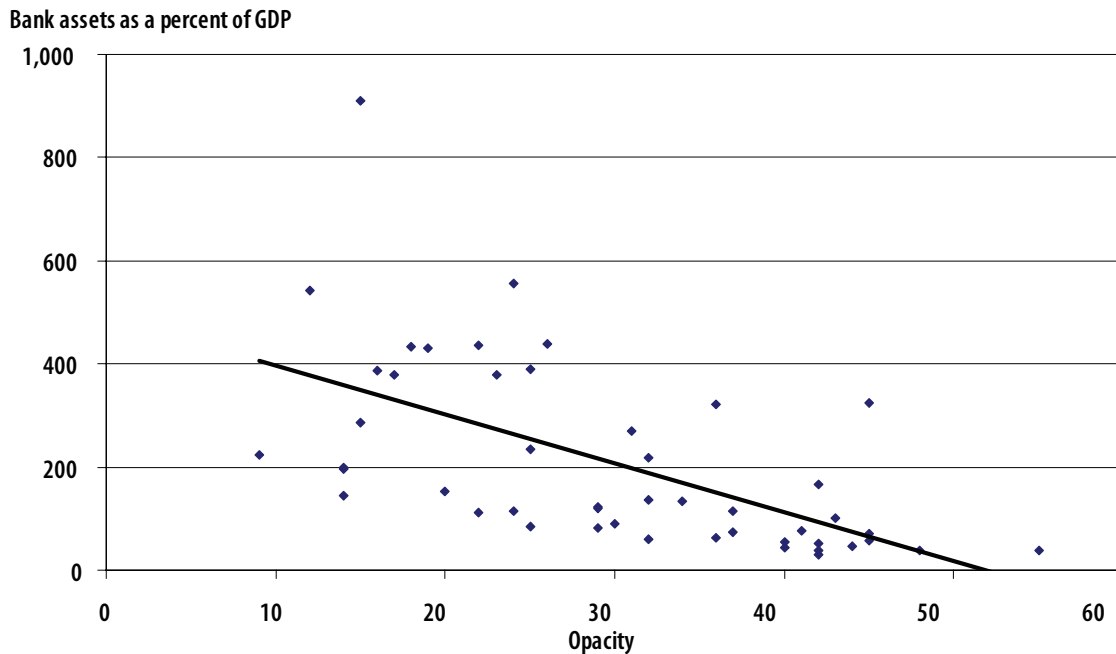
For every 1-point increase in opacity, trading of equity market as a percent of GDP decreased by 5.1 percentage points



In addition, opacity is also highly correlated with bank deposits, another (though less reliable) source of funding for entrepreneurs.

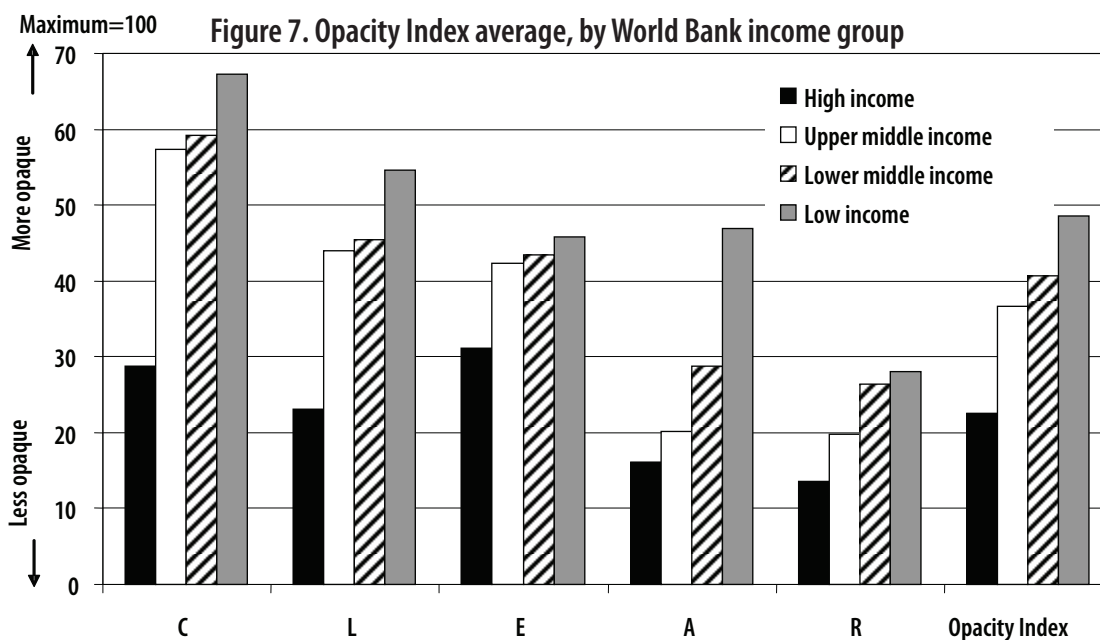
Figure 6. Opacity vs. bank assets

For every 1-point increase in opacity, bank asset as a percent of GDP decreased by 9.5 percentage points





The above-mentioned observations hold true on a global basis and by country income levels.



Predictive Value of the Opacity Index

Because the Opacity Index looks at risks quantitatively in areas where business and government meet, shifts in the Index have predictive value.

Over the years, as noted earlier, the position of the United States has fallen from number four to number thirteen.

To anyone familiar with the Index and what it measures, this would have indicated trouble looming, especially with regard to U.S. enforcement and regulatory issues. Some of those issues, as mentioned in previous updates, had to do with the cost and rigors of complying with legislation. Costs associated with what could be called “overregulation” in some areas led a number of European companies to list their shares in markets outside the United States.

At the same time, there were also issues in the United States associated with “under-enforcement,” as in the example already cited, in which market participants failed to get the enforcement division of the Securities and Exchange Commission to examine entities controlled by Bernard Madoff. These two competing forces, overregulation and under-enforcement, produced results that the Index noted.

Although it is up to individuals to assess how positive or negative changes in each CLEAR factor affect their businesses, the Index does indicate areas that require special attention. A poorly functioning legal system—or a poor showing on any of the five CLEAR factors—does not necessarily indicate one should not do business or invest in a country; it only indicates a need for prudence.



Can We Wait for Improvements?

In some areas of the world, the argument has been made that reforms with regard to each of the CLEAR factors of the Opacity Index should wait until the global economy has recovered from the financial crisis. But research on the Opacity Index suggests the opposite is true. Capital flows proceed for four reasons: 1) opportunities exist; 2) risks are low, relative to the potential returns on those opportunities; 3) transparency is sufficient for an investor to make adequate judgments regarding value; and 4) trust is high that if a problem is encountered, there are ways to resolve it.

The problem with opacity is that it makes it difficult to understand the true nature of each of these four items. As a result, delaying reforms until a recovery is under way is likely to impede recovery by retarding the flow of capital. From the standpoint of the current financial crisis, lowering the overall level of opacity is as important to the recovery process as infusing the system with new capital. From the trust perspective alone, investors are most likely waiting until they believe sufficient reforms have been accomplished before deploying the very sizeable amounts of money now sitting on the sidelines.

For all these reasons, this new edition of the Opacity Index—and updates planned for subsequent years—can be viewed as one yardstick by which the reformat process can be measured. Shifts in scores in the countries under consideration will indicate whether policymakers around the world have decided to address their individual and unique opacity problems. As they do, this research suggests capital will move from the safety of insured money markets, Treasury securities, AAA-rated bonds, and insured bank deposits into the debt and equity markets. But this research also suggests that these funds will not be deployed until a higher level of trust is returned to the markets. As this research indicates, opacity has a cost that can be measured in terms of risk and returns on capital. But it can also be measured—and perhaps should be measured—as an aggregated indicator of trust.

In these difficult times, behaviors that were tolerated when the prices of oil, natural gas, commodities, and real estate were soaring are not likely to be tolerated when those prices fall.



About the Authors

Joel Kurtzman is a Senior Fellow at the Milken Institute and Publisher of *The Milken Institute Review*. He is also Executive Director of SAVE (Strategic Action Volunteer Effort), an initiative focused on energy security and environmental sustainability, as well as senior advisor to Knowledge Universe and a principal at the Kurtzman Group. Previously, he was global lead partner for thought leadership and innovation at PricewaterhouseCoopers, where he was responsible for developing new, marketable ideas in strategy, technology, the capital markets, and business policy. Kurtzman is the former executive editor of the *Harvard Business Review* and a former member of the editorial board of Harvard Business School Publishing. He was also business editor and columnist at *The New York Times*. He was a columnist for *Fortune*, *Chief Executive* and the *European Business Forum*. Kurtzman is a member of the editorial board of MIT's Sloan Management Review and an advisor to Wharton's SEI Center. He has lectured around the world, hosted television and radio programs globally, and served as chairman of numerous conferences. Kurtzman received his B.A. from the University of California, Berkeley, and a master's degree from the University of Houston in studies of the future (economic forecasting). He has served on public and private company boards and on the boards of nonprofit organizations.

Glenn Yago is Director of Capital Studies at the Milken Institute and an authority on financial innovations, capital markets, emerging markets, and environmental finance. He focuses on the innovative use of financial instruments to solve long-standing economic development, social, and environmental challenges. Prior to joining the Institute, Yago served as a professor at the State University of New York–Stony Brook and City University of New York Graduate Center. He has also taught at Tel-Aviv University and is a visiting professor at the Hebrew University of Jerusalem, where he directs the Koret–Milken Institute Fellows program. He is the author of five books, including *Global Edge* (Harvard Business School Press) and *Beyond Junk Bonds* (Oxford University Press), and co-editor of the Milken Institute Series on Financial Innovation and Economic Growth (Springer). Yago created the Milken Institute's Capital Access Index, an annual survey measuring access to capital for entrepreneurs across countries, and co-created the Opacity Index, measuring financial risks associated with corruption, legal, enforcement, accounting, and regulatory practices internationally. His opinions appear regularly in *The Los Angeles Times* and *The Wall Street Journal*. Yago is a recipient of the 2002 Gleitsman Foundation Award of Achievement for social change. He earned a Ph.D. at the University of Wisconsin, Madison.



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