

WHY WE NEED GLOBAL STANDARDS FOR CORPORATE DISCLOSURE

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I

INTRODUCTION

After two years of gradual revelations concerning undisclosed information on suicidal risks to children on antidepressants, a federal advisory committee in September 2004 recommended that such drugs be labeled to alert physicians and consumers of this risk.¹ The recommendation stemmed from drug trial information developed by the U.K. firm GlaxoSmithKline (GSK),² and emerged amidst considerable scientific uncertainty and continuing public scrutiny of the quality and effectiveness of the drug screening and approval process of the Food and Drug Administration (FDA).³

The episode began in 2002 when an FDA official, Dr. Andrew Mosholder, reviewed data submitted for FDA review by GSK regarding its antidepressant, Paxil.⁴ In its filings, the company used the term “liability” to refer to potential adverse effects for Paxil users relative to patients who received a placebo.⁵ In May 2003, supplemental company filings indicated higher rates of suicidal behavior among patients taking Paxil than among placebo recipients.⁶ Furthermore, Paxil offered no better results than did the placebo.⁷

After requesting similar information from other antidepressant manufacturers, including American and Swiss firms, and receiving data covering twenty-two studies and 4250 children, Mosholder concluded that children using drugs were nearly twice as likely to develop suicidal tendencies as those administered a placebo.⁸ FDA questioned Mosholder’s findings and contracted

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1. Jonathan Mahler, *The Antidepressant Dilemma*, N.Y. TIMES, Nov. 21, 2004, § 6 (Magazine), at 59.

2. *Id.*

3. See, e.g., Jerry Avorn, Op-Ed., *Prescription Anxiety*, BOSTON GLOBE, Sept. 20, 2004, at A11 (describing the doctor–author’s criticism of FDA practices).

4. Gardiner Harris, *Antidepressant Study Seen to Back Expert*, N.Y. TIMES, Aug. 20, 2004, at A16.

5. *Id.*

6. *Id.*

7. *Id.*

8. *Id.*

with Columbia University to review and expand the inquiry.⁹ The results, released in 2004, confirmed Mosholder's conclusion: the risk factor was 1.78 among antidepressant users relative to placebo users.¹⁰ At that juncture, practitioners were left to decide whether the risks of the drugs were worth the potential gains, a decision complicated by the paucity of alternative reliable tools to combat childhood depression.

The antidepressant story is noteworthy in its own right, shedding light on the tangled web of legal, regulatory, economic, and ethical issues surrounding disclosure practices in the pharmaceutical industry. At the same time, it is instructive at a higher level of inquiry, one that emerges upon stepping back from the immediate controversy to the sources, ownership, and dissemination of knowledge in a globalizing world.¹¹ The complex interworkings of an emerging global economy make it necessary for corporate standards for disclosure to be established and enforced.

II

DISCLOSURE IN A GLOBALIZING WORLD

In the twenty-first century, knowledge-based assets controlled by businesses—such as pharmaceuticals, software, and financial services—increasingly move easily across frontiers. Although the emergence of a global economy is viewed by most as inevitable and probably irreversible, heated debates over who wins and who loses remain intense and unresolved. At the same time, international agreements and organizations that reflect and accelerate an increasingly interconnected world seem destined to become permanent fixtures of international relations in the twenty-first century. For example, agreements governing patent protections and world trade are critical lubricants in the transnational flow of tangible goods—like petroleum and computers—and intangible assets, such as intellectual property and brands.

Alongside these increasing formal global connections is a still fluid and fragmented parallel international regime whose overarching focus is on infusing a moral dimension into the global economy and the markets upon which it is built. This regime depends on voluntarism and moral persuasion rather than on legal enforceability, and it comprises dozens of codes, principles, standards, and guidelines.¹² Many of the components of this regime are developed and

9. *Id.*

10. *Id.*

11. "Knowledge" in this paper is broadly construed to mean scientific understanding, information, and economic value resulting from human intelligence as opposed to physical materials. Thus, "knowledge economy," "knowledge industries," and "knowledge assets" are terms that appear in various parts of the discussion.

12. See DEBORAH LEIPZIGER, *THE CORPORATE RESPONSIBILITY CODE BOOK* (2003) (detailing the characteristics of a variety of different codes); FANNY CALDER & MALAIKA CULVERWELL, *FOLLOWING UP THE WORLD SUMMIT ON SUSTAINABLE DEVELOPMENT COMMITMENTS ON CORPORATE SOCIAL RESPONSIBILITY*, Annex 2 (2005) (listing major international initiatives in corporate responsibility).

disseminated by multilateral organizations; the United Nations' *Universal Declaration of Human Rights* and *Global Compact*, the Organisation for Economic Cooperation and Development's *Guidelines for Multinational Enterprises* and *Principles of Corporate Governance*, and the International Labour Organization's (ILO) *Core Labour Standards* are examples. Other components, such as the *Global Reporting Initiative*¹³ and *Transparency International*,¹⁴ were given impetus by civil society organizations and evolved into multisectoral (or "multistakeholder") arrangements. Still others, like the *Caux Principles* and the International Chamber of Commerce's *Principles for Sustainable Development*, are products of the business community.

In the last half-century, these two emergent parallel regimes—formal agreements and soft law—have served different but complementary purposes. In the aftermath of World War II, new global entities emerged with the purposes of securing the peace and establishing new ground rules for international relations in order to avert the catastrophic consequences of a third global conflict. Institutions such as the International Monetary Fund, the World Bank, and the International Finance Corporation were designed to accelerate and spread economic development across nations and regions. Concurrently, the birth of the U.N., the *Universal Declaration of Human Rights*, the continuing evolution of core labor standards under the aegis of the ILO, and a host of environmental accords and conventions collectively represented an effort to implant a moral compass into the postwar global landscape, to balance the rights of those who would benefit from globalization with a set of generally accepted obligations associated with such rights.

Although progress has been made on both fronts, it has been an erratic and uneven trajectory. The rights of corporations to free trade in products and services that benefit corporate owners—specifically shareholders—are the most mature, outpacing the evolution of enforceable universal rights that protect individuals, workers, and the environment. The ability of corporations to mobilize and represent their shared interests is a powerful driver of such progress. Though the contours of corporate obligations are becoming more sharply delineated,¹⁵ the absence of accountability and enforceability at the international level remains a major stumbling block to achieving parity between rights and obligations. As recently as September 2004, U.N. Secretary General Kofi Annan made this point before the U.N. General Assembly: "Those who

13. See *infra*, footnotes 47–48, 51–76, and accompanying text.

14. Transparency International, a Berlin-based international civil society organization focused on the elimination of corruption in all sectors of society. See <http://www.transparency.org/>

15. See, e.g., U.N. Econ. & Soc. Council [ECOSOC], Comm. on Human Rights, Sub-Comm. on Promotion & Prot. of Human Rights, *Economic, Social and Cultural Rights: Norms on the Responsibilities of Transnational Corporations and Other Business Enterprises with Regard to Human Rights*, 4–6, U.N. Doc. E/CN.4/Sub.2/2003/12/Rev.2 (Aug. 26, 2003), available at <http://daccessdds.un.org/doc/UNDOC/GEN/G03/160/08/PDF/G0316008.pdf> (detailing the responsibilities of transnational corporations and other business enterprises).

seek to bestow legitimacy must themselves embody it, and those who invoke international law must themselves submit to it.”¹⁶

III

KNOWLEDGE AND EARLY WEALTH CREATION

For most of the five centuries since the conception of the earliest corporations in Europe, wealth generation has been measured principally by tangible assets—buildings, equipment, materials, and inventory of intermediate and final products. Indeed, the early joint partnerships—the precursor to the modern limited liability corporation—brought together clusters of investors whose goals were to discover, transport, and trade as many physical assets as possible.¹⁷ These assets were human and nonhuman in nature, ranging from the minerals and crops from the East and West Indies to the human slave trade between Africa, Latin America, and the United States. For some players, the wealth creation was in the transaction itself.

At the dawn of the industrial revolution in the mid-eighteenth century, the nature of wealth began to shift rapidly as new types of physical assets rose to the top of the value chain.¹⁸ Raw ingredients gave way to intermediate products, such as machinery and steam power, and final goods, like textiles and spirits. This created a new type of wealth through value-added manufacturing processes.¹⁹ Along with this historical transformation, applied science played a critical role in enabling the shift from cottage to factory production. The invention of the steam engine in 1712, arguably the most seminal development of the early industrial era, increased the capacity and speed of processing raw materials into intermediate and final products to unprecedented scales. The science and engineering embodied in such inventions was indispensable to the sweeping economic transformation of the late eighteenth century. However, the returns to the original inventors paled relative to those of the entrepreneurs who applied breakthrough technologies to new production capacity.²⁰

Wealth creation of this nature and scale spurred a parallel transformation in the character of the corporation itself. As new technology unleashed seemingly limitless potential for wealth generation, a wave of capital needs and capital owners’ rights swiftly followed.²¹ To meet such needs, the modern limited liability corporation gradually displaced the joint stock company, in which small numbers of investors were close to or directly supervised the corporation’s day-

16. Warren Hoge, *The Reach of War: United Nations; Annan Reiterates His Misgivings About Legality of War in Iraq*, N.Y. TIMES, Sept. 22, 2004, at A10.

17. See PAUL FRENTROP, A HISTORY OF CORPORATE GOVERNANCE (1602–2002), 49–52 (2002) (discussing the Dutch East India Company).

18. See DAVID S. LANDES, THE WEALTH AND POVERTY OF NATIONS, 186–94 (1998).

19. See *id.*

20. See generally, BENJAMIN M. FRIEDMAN, THE MORAL CONSEQUENCES OF ECONOMIC GROWTH, 52–56 (2005).

21. See generally, FRENTROP, *supra* note 17, at 163–218.

to-day operations.²² This shift occurred because the scale of capital required to support expansion outpaced the capital resources contributed by limited numbers of shareholders.

IV

TRANSFORMATION OF THE CORPORATE FORM

By the mid-nineteenth century, the corporate landscape began to shift rapidly. In the ensuing decades, limited liability corporations emerged as the corporate form of choice,²³ capable of attracting virtually unlimited capital for economic expansion while protecting any single investor from losses beyond the original investment, regardless of what happened to the corporation as whole. As detached investors became the predominant owners, their sheer numbers led to the continuous shift of decisionmaking power to corporate management with minimal oversight from those holding stock in the company.

The next phase of corporate transformation in the United States was triggered by a series of legal actions and judicial decisions in the last years of the 1800s and the first decade of the 1900s. For example, in 1886, the Supreme Court held that corporations were “persons” with constitutional protections equivalent to those of humans (even though the term “corporation” does not appear in the U.S. Constitution).²⁴ Additionally, New Jersey and Delaware initiated legislation at the state level to become a choice state for chartering corporations (though the two laws have proven to have anything but synonymous results).²⁵ Competition included measures such as abandoning the scope of activities and time limitations in corporate charters, loosening controls on mergers and acquisitions, and terminating restrictions on companies holding stock in other companies.²⁶

The collective impact of these actions, coupled with personhood status and the entrenchment of limited liability, defines the corporate form that today dominates the United States and the most advanced countries. Country-by-country variations persist,²⁷ but these differences are relatively minor compared to the core characteristics that are largely shared across industrial nations.

By the 1920s, the damage from largely unbridled corporate rights with minimum responsibilities began to surface. The idea that corporations could

22. JOEL BAKAN, *THE CORPORATION: THE PATHOLOGICAL PURSUIT OF PROFIT AND POWER* 13 (2004).

23. *Id.* at 14.

24. *Santa Clara County v. S. Pac. R.R. Co.*, 118 U.S. 394 (1886).

25. BAKAN, *supra* note 22, at 13–14.

26. *Id.* at 14.

27. Corporate charters (or their equivalent) are issued by central governments in the United Kingdom and France, in contrast to the United States and Canada, where charters are a state and provincial function. On the matter of ownership, shares in large American firms tend to be dominated by pension funds, insurance companies, and private equity groups, whereas continental European firms are frequently controlled by banks, other corporations, and insurance companies.

and should be left largely unregulated came under a wave of scrutiny.²⁸ Triggered by a backlash against deplorable labor practices, monopolies, and oligopolies, and by sheer unfettered growth, the notion that government had a legitimate role in regulating corporate behavior gradually took hold.²⁹ As corporations such as AT&T, General Motors, Standard Oil, and United States Rubber witnessed unprecedented expansion, profitability, and influence, anxiety about the long-term trajectory and social repercussions became increasingly prominent. Labor unrest was perhaps the most visible manifestation of this anxiety. Then came the stock market crash in 1929. This event, after three decades of no noteworthy government intervention, such as antitrust legislation, marked a turning point in government–business–society relations.

With the stock market collapse and the onset of the Great Depression, public regulation of many corporate practices became inevitable. The ensuing governmental activism profoundly reshaped not just government–business relationships, but government–labor relationships as well. The negative social consequences of unrestrained free markets spurred action to create, for the first time, a safety net in the form of social security and fair labor standards, as well as public works programs to alleviate an intensifying unemployment crisis. President Roosevelt’s New Deal, unlike the more incremental legal and regulatory reforms of the prior decades, replaced the market’s “invisible hand” with the “very visible, and benevolent, hand of government.”³⁰

V

THE DEBUT OF STANDARDIZED DISCLOSURE

This redefinition of the government’s role produced another seminal outcome—the development of the idea that publicly held corporations must report their financial condition to their shareholders through regular, consistent, and audited disclosures. The absence of such disclosure requirements before the creation of the Securities and Exchange Commission (SEC) in the 1930s in retrospect seems astonishing since their absence was a powerful force in the collapse of the capital market. By the early 1930s, even large corporations recognized that markets without reliable information could not survive and that such conditions would undermine legitimacy and ultimately lead to even more aggressive governmental intervention.

Thus, the foundations of modern corporate financial reporting were put in place. They continue to evolve, spawning and redefining numerous professional and quasi-professional organizations such as the Federal Accounting Standards Board (FASB) and the American Institute of Certified

28. BAKAN, *supra* note 22, at 17.

29. See generally ADOLF A. BERLE & GARDINER C. MEANS, *THE MODERN CORPORATION AND PRIVATE PROPERTY* (1991).

30. BAKAN, *supra* note 22, at 86.

Public Accountants. Although detailed definitions, protocols, and—most relevant to this paper—the scope of such reporting remain a work in progress, the basic notion of standardized reporting is a fixture in the nexus of government–business–societal relations.

A. New Forms of Knowledge and Value Creation

The dominant corporate form has remained largely unchanged during the twentieth century, but the source of wealth creation has not. In the United States, as in most industrial nations, profound structural changes have occurred in the makeup of the national economy, the role of knowledge in wealth creation, and the associated assets that business creates and seeks to protect.

Structural changes in the nation's economy began in earnest after World War II. The industrial economy shifted from one dependent on materials used to create physical products to a knowledge-based economy in which value is rooted in human intelligence. Thus, medical instruments and semiconductors have displaced machine tools and appliances as leading industrial sectors.

Even within traditional industries, value is now created in new knowledge-based ways. Auto manufacturers, witnessing a convergence in price and quality across producers, are investing major resources in technological innovation for hybrid-fuel vehicles and in-car electronics such as global-positioning systems and rear-seat entertainment systems. Segments of the chemical industry are shifting dramatically away from bulk (commodity) chemicals to science-intensive, advanced materials and biotechnology. The pharmaceutical sector, by nature knowledge-based, has been very profitable in the last few years. It regularly forms alliances, partnerships, and joint ventures with kindred industries such as biotechnology, diagnostics, health care, and information services—all knowledge-based, rather than materials-intensive, sectors. Alan Greenspan, Chairman of the U.S. Federal Reserve Board, put it succinctly: “An ever-increasing share of GDP [gross domestic product] has reflected the value of ideas more than material substance or manual labor.”³¹

Knowledge is perhaps the most prominent intangible asset reshaping value creation, but it is not the only one. Other similar assets include brand equity, reputation, networks, alliances, and supply chain management systems. These collectively drive company profitability and market value in ways that defy traditional economics and accounting methods rooted in physical assets.

Paradoxically, quantitative measures of the scientific, technological, and innovative capacity, or any other surrogate for knowledge-driven value creation, rarely appear in company annual reports in a consistent and comparable manner. Balance sheets remain notably unbalanced when it comes to disclosing the quantity and quality of all forms of human capital. Thus, the

31. Alan Greenspan, Chairman, Fed. Reserve Bd., Remarks at the Washington Economic Policy Conference of the National Association for Business: The Challenge of Measuring and Modeling a Dynamic Economy (Mar. 27, 2001), available at <http://www.federalreserve.gov/boarddocs/speeches/2001/20010327/default.htm>.

market value³² of a large company such as Microsoft, Intel, Cisco, or General Electric often greatly exceeds its “book” value, which is dominated by traditional physical assets.³³ Although this discrepancy is not entirely attributable to knowledge assets, it is a particularly powerful determinant in science- and technology-based companies. Consistent with this overall trend, 1997 marked the first time in U.S. history that investments in intangibles such as research and development (R&D), training, and brands, estimated at approximately \$1 trillion, exceeded investments in property, plant, equipment, and other tangibles.³⁴

B. Corporations as Knowledge Gatekeepers

The shift to a knowledge economy has not been a seamless and smooth economic transformation, as the collapse of the dot-com sector vividly demonstrates. However, it is surely a trend that will continue in the United States and other industrial nations. In the view of many, the trend will similarly accelerate in the coming decades in key emerging economies such as India and China that already are shifting from materials to knowledge as a key source of wealth creation.³⁵

Developed countries will continue to rely increasingly on scientific and technological innovation to create and supply product and service markets. Efficiency gains in production processes combined with longevity gains in the lifespan of products tend to neutralize cost and quality differentiation among companies that produce comparable products. This leaves the application of cutting-edge science and technology—the next-generation computer chip, a breakthrough HIV–AIDS drug, a hydrogen vehicle—as a future driver of value creation. Even in developing countries, “appropriate” technology is likely to play a leading role in meeting the basic needs of the world’s poor for food, potable water, shelter, health services, and education. Computer-based education and literacy programs, microenterprises based on mobile phones, and small-scale, dispersed renewable photovoltaic electricity production are examples of knowledge-based innovations that will potentially alleviate poverty while offering business opportunities for local, national, and multinational entrepreneurship.³⁶

32. Market value is calculated by multiplying the value per share by the number of shares.

33. See generally JAMES E. POST, LEE E. PRESTON & SYBILLE SACHS, *REDEFINING THE CORPORATION; STAKEHOLDER MANAGEMENT AND ORGANIZATIONAL WEALTH* 35–56 (2002).

34. JONATHAN LOW & PAM COHEN KALAFUT, *INVISIBLE ADVANTAGE: HOW INTANGIBLES ARE DRIVING BUSINESS PERFORMANCE* 27 (2002).

35. Informational technology and low-cost medical technology are examples of rapidly expanding sectors in both India and China. See Manjeet Kripalani, *Getting the Best to the Masses; A Wave of Innovation is Yielding High-Quality Goods that India's Poor Can Afford*, *BUS. WK.*, Oct. 11, 2004, at 174.

36. See generally, C.K. PRAHALAD, *THE FORTUNE AT THE BOTTOM OF THE PYRAMID: ERADICATING POVERTY THROUGH PROFITS* (2005) (detailing a series of case studies of knowledge-based enterprises that are alleviating poverty).

As these trends unfold, the evidence of financial returns to knowledge assets emerges.³⁷ A clear association exists between patent activity and share price as well as patent activity and market-to-book ratios.³⁸ Consistent with these findings are other, related results: overall returns to R&D exceed corporate cost of capital, and returns to basic (fundamental) research are substantially higher than returns to applied and process R&D.³⁹ Thus, the further upstream the knowledge creation, the greater the interest of investors.

The implications of these trends for protecting and commercializing knowledge are profound. As the relationship between knowledge-based assets and financial returns becomes clearer, so too will the pressure on corporations to protect such assets and to seek assets they do not yet control. This phenomenon is not new. The entire infrastructure that protects intellectual property, for example, is premised on the notions that knowledge owners deserve property rights and that such protections are in the public interest because they reward and stimulate new inventions.⁴⁰

Thus, as knowledge assets play an increasingly powerful role in the national and global economy, the stakes to secure and extend protective measures will increase commensurately. It is no surprise that some of the most divisive episodes in international economic relations center on protection of property rights. Illustrative cases include consumer entertainment products in China, generic drug manufacturing in India, and European Union actions against Microsoft's product protections. A telling case is the conflict between pharmaceutical company Abbott Laboratories and the government of Brazil concerning the price of Abbott's HIV-AIDS drug, Kaletra. The government, whose policy of providing free drugs to all needy HIV-AIDS patients signifies a major expense, threatened to break patent protection if Abbott did not lower the price of the drug.⁴¹ This and other examples reflect the unsettled state of international rules, as well as the pressure to agree on rules that protect what companies—and evidently investors—perceive as essential sources of future value in the global economy.

C. The Cost of Nondisclosure

What, then, may be said of the social cost of nondisclosure? The 1929 stock market crash was a stark, early episode of the consequences of the lack of transparency. This episode was a harbinger of a continuous debate over

37. BARUCH LEV, *INTANGIBLES: MANAGEMENT, MEASUREMENT, AND REPORTING* 132 (2001).

38. *Id.* at 60. Market-to-book ratio is an indicator of the spread between investor perception of company prospects and the totality of its conventional, largely tangible assets.

39. *Id.* at 61–62. Cost of capital is how much a corporation pays to borrow money or raise equity capital. “In process R&D refers to research and technology projects in the development process that are acquired by business enterprises, often with other tangible and intangible assets.” *Id.* at 87.

40. This was recognized over two centuries ago by the founding fathers and enshrined in the U.S. Constitution by enabling Congress to secure “for limited times to authors and inventors the exclusive right to their respective writings and discoveries.” U.S. CONST. art. I, § 8, cl. 8.

41. Todd Benson, *Brazil Says Deal on Drug Isn't Assured*, N.Y. TIMES, July 16, 2005, at C13.

corporate disclosure that to this day remains unsettled and observable in local, national, and global corporate activities.

From the vantage point of the scope of disclosures, the inadequacies of conventional financial reporting become more acute with each step toward a knowledge-based economy. The gap is widening between accounting methods, measurement tools, and financial reporting on the one hand, and the sources of value creation through knowledge assets on the other. Under the umbrella of “information asymmetries,” Baruch Lev⁴² suggests the following adverse consequences for one key stakeholder, the investor community, as well as society in general:

- (1) Abnormal gains to informed investors—as, for example, when managers hold internal information on the early results of drug trials that, once made public, will increase the value of the stock they hold in the company;
- (2) Deterioration in investors’ confidence in the integrity of markets, leading to suboptimal trading volumes and transactions and low overall efficiency in resource allocation across sectors and companies;
- (3) Increasing cost of capital, owing to higher perceived risk, driving investors to seek higher returns to offset such higher risk of companies with substandard disclosure practices. This translates to higher costs of goods and services for society as a whole.⁴³

Corroborative findings have appeared recently in studies by ratings organizations that assess the risk and investment quality of publicly traded companies.⁴⁴ Telling evidence appeared as early as the mid-1960s when over-the-counter markets saw a dramatic reduction in stock price volatility once mandatory disclosure standards were imposed.⁴⁵ More recently, a 2002 Standard & Poor’s analysis of the disclosure practices of 1500 companies found that the “amount of information companies provide in their annual reports is correlated to market risk and valuations.”⁴⁶ Specifically, greater disclosure led to a higher price-to-book ratio and the ability to lower the cost of capital.⁴⁷

More specific to disclosures of a social and environmental nature is the financial performance of corporations that publish annual “sustainability reports” using the Global Reporting Initiative (GRI) framework. The GRI

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43. LEV, *supra* note 37, at 93–98.

44. See, e.g., SANDEEP A. PATEL & GEORGE S. DALLAS, STANDARD & POOR’S, TRANSPARENCY AND DISCLOSURE: OVERVIEW OF METHODOLOGY AND STUDY RESULTS-UNITED STATES 11–14, (2002), available at <http://ssrn.com/abstract=422800> (concluding that greater disclosure leads to lower cost of capital and market volatility).

45. Allen Ferrel, *Measuring The Effects of Mandated Disclosure*, 1 BERKELEY BUS. L.J. 369, 377 (2004).

46. PATEL & DALLAS, *supra* note 44, at 4.

47. *Id.*

guidelines cover a wide range of environmental, social, and economic indicators that reach well beyond conventional financial reporting.⁴⁸ Among these indicators are many that act as rough proxies for the knowledge assets of the organization. Recent findings indicate that among the companies that have used the GRI framework—more than 800 in over forty countries—a moderately positive correlation exists between the use of the GRI and lower share-price volatility, higher operating profits, and greater revenue growth.⁴⁹

Collectively, these findings point to two critical aspects of the linkage between disclosure, value, and assets. First, in general, higher standards of disclosure build confidence and efficiency in capital markets. The attendant benefits accrue to investors, at minimum, and to other stakeholders such as employees and customers, at best, depending on how these benefits are ultimately allocated across stakeholder groups. Second, disclosures specifically related to the quantity and quality of knowledge-based assets—capacity to innovate, resources dedicated to human capital such as employee training and education, and levels of R&D expenditures—contribute to value creation. The convergence of these two streams suggests that public policies that drive higher standards of nonfinancial disclosure, especially those relating to knowledge-based assets, are likely to yield a range of social benefits that have yet to achieve rigorous measurement and full disclosure.

V

EMERGING INTERNATIONAL DISCLOSURE STANDARDS

Amidst a rising tide of questions surrounding the role of corporations in a globalizing economy, disclosure standards are a key, cross-cutting dimension that intersects many emerging themes of the “corporate responsibility” agenda.⁵⁰ Issues such as corporate governance, fair labor standards, and environmental impacts are actively debated in business, civic, labor, and governmental circles. Intersecting all these issues is the question of disclosure. What should be the scope and content of such disclosures? In what form? To whom? Through what media? And how can readers be assured that the information is complete, accurate, and material to their needs?

These challenges have led to a multitude of principles, guidelines, and standards that are gradually elevating the idea of corporate disclosure to a

48. See Global Reporting Initiative, <http://www.globalreporting.org> (last visited Mar. 31, 2006). GRI is a multi-stakeholder initiative officially launched in April 2002 as an institution in partnership with the United Nations Environmental Program. The initiative is widely viewed as the emerging global standard in nonfinancial reporting. The author is co-founder and was former Acting Chief Executive Officer of GRI between 1998 and 2002.

49. LUCY GREEVES & DAVID LADIPO, *ADDED VALUES? MEASURING THE ‘VALUE RELEVANCE’ OF SUSTAINABILITY REPORTING* 5 (2004).

50. For an overview of this agenda, see Business for Social Responsibility, <http://www.bsr.org> (last visited Mar. 31, 2006).

global norm.⁵¹ Rooted in the “right-to-know” movement in the United States, strengthened by related initiatives in the European Community in the 1990s, and brought to the global stage via the “corporate accountability” theme at the United Nation’s 2002 World Summit on Sustainable Development in Johannesburg, corporate disclosure is now a central element in the ongoing debates about the role and responsibilities of corporations in the twenty-first century. Meanwhile, the episodes of Enron, WorldCom, Royal Ahold, Parmalat, and similar transparency and governance failures that have occurred since 2000, while most directly related to traditional financial information, have had the spillover effect of deepening concerns regarding the quality of corporate reporting of nonfinancial information.

Among these many initiatives, the GRI is particularly relevant to the knowledge assets on which this paper is focused.⁵² The GRI was conceived in 1997 by the Coalition of Environmentally Responsible Economies (CERES), a Boston-based environmental advocacy group, with technical support from Tellus Institute, a Boston-based think-tank. In fewer than five years, the GRI grew from a bold but untested vision to a leading international-standards institution for nonfinancial corporate reporting. Approximately analogous to the London-based International Accounting Standards Board (IASB), whose mission is to harmonize global accounting rules,⁵³ the GRI’s mission is to create and continually enhance a generally accepted framework for reporting social, environmental, and economic (apart from financial) performance at the organizational level.⁵⁴

The GRI story is instructive for several reasons. First, the initiative was conceived and brought to fruition under the leadership of civic organizations, rather than business or government.⁵⁵ After a decade of disparate, national-

51. This proliferation of corporate responsibility initiatives has led to a wide, and some argue bewildering, array of possible solutions. These include codes and principles of corporate conduct that establish broad behavioral norms, reporting standards that describe the content of disclosed information, and management and standards that specify specific expectations or targets for corporations to achieve relative to social, environmental, and governance procedures, activities, and outcomes.

52. Other leading, complementary initiatives with a prominent disclosure component are *The OECD Guidelines for Multinational Enterprises*, see Leipziger, *supra* note 12, at 52–67; *The OECD Corporate Governance Principles*, see *id.* at 324–30; and *AccountAbility 1000 Framework and AccountAbility 1000 Assurance Standard*, see *id.* at 374–424.

53. International Accounting Standards Board, About Us, <http://www.iasb.org/about/index.asp> (last visited Mar. 31, 2006).

54. GLOBAL REPORTING INITIATIVE, SUSTAINABILITY REPORTING GUIDELINES 2002 1–3 (2002), available at http://www.globalreporting.org/guidelines/2002/gri_2002_guidelines.pdf.

55. The GRI positioned itself as a voluntary initiative, seeking to build a strong coalition of business and nonbusiness groups while advancing the case for a generally accepted framework of voluntary nonfinancial reporting. As the program evolved, governments—especially in Europe and Japan—became increasingly attentive to the GRI’s progress. Governments’ embrace of nonfinancial reporting, and of the GRI specifically, continues to intensify and expand. Examples abound: in France mandatory social and environmental reporting applies to all companies listed on the Paris Stock Exchange, Australia has adopted a voluntary national environmental reporting framework based heavily on the GRI, the South Africa King Commission on Corporate Governance advocates the GRI

level efforts to strengthen social and environmental disclosure,⁵⁶ the GRI filled a leadership vacuum in the area of corporate disclosure standards. By the late 1990s—a decade after the historic events of the Bhopal chemical tragedy in India and the *Exxon Valdez* oil spill in Alaska—corporate transparency practices were becoming increasingly troublesome for both reporters and report users. Although increasing numbers of corporations were disclosing their environmental and, to a lesser extent, social performance, the credibility of reports was severely undermined by the absence of an independent, neutral, legitimate mediating institution that could establish and steward a reporting framework.⁵⁷ This was the need, and opportunity, that inspired the GRI.

Second, unlike financial reporting, whose principal audience is investors, social and environmental information is of interest to a broader constituency.⁵⁸ To create a credible, generally accepted framework, the GRI had to create a process in which the views and voices of multiple constituencies were convincingly represented. Thus, a multistakeholder approach to technical work and institutional governance became indispensable to the GRI from its earliest stages.

Third, while many approaches to nonfinancial reporting had emerged in the late 1980s,⁵⁹ the field was essentially in its infancy at the moment of the GRI's conception. This stands in contrast to seventy-five years of modern financial reporting, during which definitions, methods, and protocols have evolved into an elaborate, though still changing, accounting and reporting framework. For the GRI, such uncharted terrain was both an impetus and a hurdle. The impetus was the increasingly obvious shortcomings of financial reporting which were failing to keep pace with new determinants of corporate financial performance, such as knowledge assets, as well as new demands of noninvestors for nonfinancial disclosures. The principal hurdle was, and still is, the challenge of elevating nonfinancial reporting to a level of general acceptance equivalent to financial reporting absent government mandates and institutions such as the FASB and the SEC.

Unlike financial reporting, which evolved on a country-by-country basis, the GRI formed from the outset as a global framework. It faced a clear pathway,

as a component of its best corporate governance practices, and Japan's environmental reporting guidelines (which in Japan is tantamount to mandatory) reflect evidence of a strong GRI fingerprint.

56. Examples of such efforts include the U.S. Toxic Release Inventory (TRI), The Netherlands Environmental Protection Act, and the Denmark Green Accounts Act. KPMG, MANDATORY AND VOLUNTARY STANDARDS FOR SUSTAINABILITY REPORTING 19–22 (2005) (draft discussion document for Sustainability Reporting: Public Policy Trends Workshop, hosted by the United Nations Environment Programme, on file with author).

57. GLOBAL REPORTING INITIATIVE, *supra* note 54, at 4.

58. This constituency includes, for example, activists, employees, communities, consumers, and suppliers.

59. Various companies experimented with selected disclosures covering, for example, air or water pollutants. But it was not until the formation of the American civil society group CERES in 1989 that the concept of systematic, comparable disclosures begin to take shape. See Ceres, <http://www.ceres.org/ceres/> (last visited Mar. 31, 2006).

relatively unimpaired by powerful competing institutions and traditions such as national financial accounting boards, professional accounting bodies, and securities commissions. Although the GRI had to remain attentive to the many disparate corporate and national level efforts in nonfinancial reporting, a window of opportunity existed to build a global framework and institution without the inertia facing organizations such as the IASB.

Fourth, the nature of nonfinancial reporting has required inventiveness that can learn from, but must recognize differences with, financial reporting. Three examples illustrate this critical point: principles of reporting,⁶⁰ sector-specific disclosures,⁶¹ and qualitative indicators of performance.⁶²

In the case of principles of reporting, embedded in the concept and practice of financial reporting is a set of key elements that transcend specific rules, protocols, and metrics. Examples include timeliness,⁶³ completeness,⁶⁴ and auditability.⁶⁵ For nonfinancial reporting, the GRI developed similar principles to ensure rigor and comparability of reports that use the GRI framework. But it did not simply import them wholesale from the financial domain. The differences between the two reflect that nonfinancial reporting covers issues as wide-ranging as corporate governance, labor standards, product safety, and worker health, and speaks to wider audiences that include, but are not limited to, investors.

Thus, the GRI's reporting principles adapt to the familiar financial reporting principles, but also illuminate a "sustainability context"⁶⁶ that situates reported information in a broader social and environmental context.⁶⁷ Also embedded in the principles is the notion of "inclusiveness,"⁶⁸ a signal to reporters that systematic stakeholder consultation is a precondition for shaping the final content and scope of disclosures contained in a GRI report. Applied to a pharmaceutical company,⁶⁹ for example, the GRI principles imply that such a company would make some reference to its role in addressing national or global health priorities such as affordable drugs, remedies for widespread tropical diseases, or combating the HIV–AIDS pandemic. They also imply that the

60. GLOBAL REPORTING INITIATIVE, *supra* note 54, at 22–31.

61. *Id.* at 10.

62. *Id.* at 44–56.

63. *Id.* at 30.

64. *Id.* at 26.

65. *Id.* at 25.

66. *Id.* at 27.

67. Such a context might include nationally or internationally recognized goals or targets which are beyond the boundaries of the reporting company.

68. *Id.* at 24.

69. As of October 2005, twenty-six "health care products" companies worldwide report using the GRI framework, including seven U.S.-based firms: Abbot Laboratories, Allergan, Baxter International, Bristol-Myers Squibb, Genecor International, Lilly, and Wyeth. The remaining are companies based in the U.K., France, Germany, Japan, Ireland, Switzerland, Denmark, Sweden, and India. Organisations Using the GRI Guidelines, <http://www.globalreporting.org/guidelines/reports/search.asp> (last visited Mar. 31, 2006) (select Health Care Products from Activity Sector drop-down menu; click Search).

ultimate content of such a report is based on serious consultations with the company's stakeholders such as medical professionals, health care institutions, patient groups, and underserved communities.

Sector-specific standards are a second point of divergence between financial and nonfinancial GRI reporting. Why is this the case? Mining, automotive, and financial services, for example, share certain attributes that are amenable to comparison. All use energy in their products and services, pay different salary levels to employees, and are responsible for product and service safety. However, the significance of each shared attribute in assessing an organization's social, environmental, and economic performance varies widely by sector. For example, energy use in financial services represents a substantially smaller fraction of the firm's total "footprint" than it does in an oil or automotive company.

For this reason, the GRI's reporting framework operates on two tiers: the first is a generic set of indicators applicable to all sectors, while the second involves sector-specific indicators that capture the details of different types of organizations.⁷⁰ Tons of carbon emitted per unit of production, reportable workplace accidents per 100,000 person-hours worked, and salary ratio between top-paid and average employees exemplify the range of measures that help assess and communicate nonfinancial performance for all companies. But indicators such as production and sales of toxic substances and company policies regarding disclosure of drug trial information are germane only to specific types of companies.⁷¹ Whereas Wall Street is accustomed to a few leading financial indicators and indices, nonfinancial performance, with all its complexities, lacks a common denominator, such as dollars, and thus cannot be reduced to such elegance.

Qualitative indicators are a third point of divergence, although this divergence is more one of weight than absolute difference. Although financial accounting rules strive to produce comparable, quantitative results across companies, the resulting financial reports are routinely accompanied by nonquantitative information.⁷² This is expected by investors to aid in understanding a company's strategy, technology innovations, competitive position, and other critical aspects of its operations and financial prospects. Information of this nature is actually required under SEC rules in so-called Management Decision and Analysis (MD&A)⁷³ and similarly proposed in the

70. GLOBAL REPORTING INITIATIVE, *supra* note 54, at 10.

71. In this case, companies at issue include producers and users of significant quantities of chemicals and drug companies, respectively.

72. Examples include information on new products under development, new markets targeted for the coming years, and recent mergers and acquisitions. Also, financial reports typically include qualitative information such as political instability in conflict zones to alert investors to potential risks of investing in the firm.

73. Corporation Finance: Issues, Review of Fortune 500 Companies' Periodic Reports, <http://www.sec.gov/divisions/corpfm/fortune500rep.htm> (last visited Mar. 31, 2006).

United Kingdom under the heading of Operating and Financial Review.⁷⁴ In both countries, and in others such as Canada, government regulators find themselves under increasing pressure to enlarge the scope of these disclosures to include environmental and social information that is pertinent to investor decisionmaking.⁷⁵

In the case of nonfinancial reporting, a much younger and more fluid field compared to financial reporting, no presumption of quantifiability exists. A review of the 2002 GRI Guidelines reveals a broad spectrum across the fifty core indicators as well as additional, more experimental ones.⁷⁶ This is because the consensus view of the GRI process is that characterizations of social, environmental, and economic performance require more than numbers. They require textual explanations that reveal how and why boards think, management decides, employees behave, customers respond, and communities benefit from a company's actions.

This does not mean that reporters must choose between the two approaches. The optimal mix of the quantitative and qualitative disclosures varies across companies, sectors, and locations. A start-up pharmaceutical company manufacturing generic drugs has a different story to tell, and a different way of telling its story, than a midsize firm that caters exclusively or primarily to American markets.

VII

PHARMA, AGAIN

For the pharmaceutical industry, the implications of these emerging disclosure trends are profound and wide-reaching. The sector is illustrative of a class of industries whose societal footprint makes them particularly vulnerable to intense mistrust during instances of transparency missteps and failures.

Just weeks after the antidepressant disclosure episode made headline news, a second drug disclosure story with strikingly familiar features created its own waves in the medical, business, and governmental communities.⁷⁷ “Good

74. After several special commissions spanning more than ten years led to proposed revisions to Company Law, U.K. Chancellor of the Exchequer recently rejected recommendations to enlarge the scope of financial reporting by 1300 of the largest U.K. companies to include nonfinancial information. Gordon Brown MP, Chancellor of the Exchequer, Speech at the Confederation of British Industries Annual Conference (Nov. 28, 2005) *available at* http://www.hm-treasury.gov.uk/newsroom_and_speeches/press/2005/press_99_05.cfm.

75. *See, e.g.*, SANFORD LEWIS & TIM LITTLE, ROSE FOUNDATION FOR COMMUNITIES AND THE ENVIRONMENT, FOOLING INVESTORS & FOOLING THEMSELVES: HOW AGGRESSIVE CORPORATE ACCOUNTING & ASSET MANAGEMENT TACTICS CAN LEAD TO ENVIRONMENTAL ACCOUNTING FRAUD 35–40 (2004) (urging the SEC to require environmental disclosure). In the U.K., social and environmental disclosures have been prominent in debates in the Company Law Review process.

76. GLOBAL REPORTING INITIATIVE, *supra* note 54, at 39–59.

77. *See, e.g.*, Eric J. Topol, Op-Ed., *Good Riddance to a Bad Drug*, N.Y. TIMES, Oct. 2, 2004, at A15 (criticizing the pharmaceutical company's response and pointing to their conflict of interest as a primary cause).

Riddance to a Bad Drug” read an op-ed piece in a leading newspaper.⁷⁸ The mix of medicine and money, prescriptions, and profits was again in play.

This case involved Vioxx, an arthritic pain drug produced by Merck with annual sales of \$2.5 billion, representing 11% of the company’s annual revenues, and used by two million people worldwide.⁷⁹ An estimated eighty million people have used the drug.⁸⁰ Vioxx is part of a family of drugs known as COX-2 inhibitors that generates sales of approximately \$5 billion each year in the United States and \$6 billion worldwide.⁸¹

Merck’s decision to suddenly halt the sale of the drug, which was originally approved by FDA in 1999, came in the wake of rising concern about associated risks of heart attacks and strokes. As early as 2001, a study published in the *Journal of the American Medical Association* found that Vioxx had a five-times-greater risk than an over-the-counter anti-inflammatory with similar benefits.⁸² In the following years, various studies of the risks and benefits of Vioxx were conducted,⁸³ including the most recent study by Merck itself, which triggered the withdrawal of the drug.⁸⁴ The latter, focusing on the benefits of Vioxx in reducing colon polyps, yielded the surprising and “stunning” (in the words of Merck’s president of research) result that the drug increased the risk of heart attacks and strokes from 1.9% to 3.5% relative to a placebo.⁸⁵

Merck’s decision to withdraw the drug came at a high cost. The company spent \$45 million promoting the product in the first half of 2004 alone,⁸⁶ an example of direct-to-consumer marketing that increasingly characterizes the industry. Removal of the drug was as much a business story as a medical one. Merck’s stock fell 27%, and its market value fell by \$25 billion.⁸⁷ It was largely responsible for a decline of 0.6% in the Dow Jones Industrial average, the leading indicator of overall market performance.

The Vioxx incident illustrates once again the complexities and crosscurrents of managing and disclosing critical-knowledge assets—in this case, those embodied in a leading revenue generator. In the five years since its FDA approval, the drug was scrutinized for possible risks while at the same time company employees and their consultants published results that challenged

78. *Id.*

79. *Id.*

80. *Id.*

81. Pfizer’s Celebrex and Bextra are in the same family; another six related drugs in development by Merck, Novartis, GSK, Pfizer, Yamanouchi, and Sankyo are in the FDA-approval process. Andrew Pollack, *New Scrutiny of Drugs in Vioxx’s Family*, N.Y. TIMES, Oct. 4, 2004, at C1.

82. Debabrata Mukherjee, Steven E. Nissen & Eric J. Topol, *Risk of Cardiovascular Events Associated With Selective COX-2 Inhibitors*, 286 JAMA 954, 954-59 (2001); Topol, *supra* note 77.

83. Topol, *supra* note 77.

84. *Id.*

85. *Id.*

86. Barry Meier, *For Merck, Defense of a Drug Crumbles at a Difficult Time*, N.Y. TIMES, Oct. 1, 2004, at C1.

87. Gina Kolata, *Merck and Vioxx: The Overview*, N.Y. TIMES, Oct. 1, 2004, at A1.

such hypotheses.⁸⁸ In April 2002, as a result of ongoing research, the FDA requested that Merck add heart attack risks to Vioxx's label,⁸⁹ which it did. This easily missed form of disclosure to consumers is commonplace in the verbal and written warnings that accompany the direct-advertising campaigns appearing in the mass media.

The larger context of the Vioxx story is one seen often in developing and marketing new drugs. Trends in the pharmaceutical sector over many years reveal a changing business model. Although large sums of funds support drug R&D, more than twice as much is spent on marketing and administration.⁹⁰ Moreover, the industry increasingly emphasizes the production of variations of existing products rather than the pursuit of novel breakthroughs. The economics of this trend are compelling because patent protections can be granted for relatively minor changes in a drug's composition. If accompanied by effective advertising, these minor differences allow sibling drugs to generate new revenue streams while incurring relatively low R&D costs. The economics are made even more favorable since the "R" in R&D is heavily subsidized by public support of the government's vast medical research infrastructure.

Disclosure practices in the \$200 billion pharmaceutical sector⁹¹ are also influenced heavily by economic considerations. Company involvement in funding and designing drug trials is pervasive. A typical company-initiated study compares a drug's effectiveness against a placebo, rather than against an existing drug of a comparable nature. Drug trials, pre- and post-approval, are subject to negotiation with FDA, rather than decided by an independent body with no financial interests in their outcome and working in the public interest. The net result of these conditions is a bias in what appears in scientific journals and on labels: information is effectively weighted as much by the financial interests of drug makers as by the need to understand and regulate the drugs themselves.

This reticent-disclosure culture manifests itself in other aspects of reporting. With very few exceptions,⁹² nonfinancial reporting among drug companies lags behind many other sectors in terms of best practice. While the GRI has been embraced by the telecommunications, financial services, automotive, and other industries as they develop sector-specific reporting frameworks, the

88. Topol, *supra* note 77.

89. *See id.*

90. MARCIA ANGELL, THE TRUTH ABOUT THE DRUG COMPANIES: HOW THEY DECEIVE US AND WHAT TO DO ABOUT IT 49 (2004).

91. *Id.* at 3. This is the amount Americans spent on prescription drugs in 2002. Sales worldwide are in the \$400 billion range. *Id.* at 5.

92. Novo Nordisk, the Danish diabetes drug firm, is the most notable. Its corporate social reporting is widely regarded as the best in the sector and among the best in any sector. *See, e.g.*, Business for Social Responsibility, <http://www.bsr.org/CSRResources/Magazine/leadership.cfm?DocumentID=767&DocumentTypeID=8> (last visited Mar. 31, 2006). Also noteworthy is Bristol-Myers Squibb, among the pioneers of GRI reporting, though its emphasis has been heavily environmental. Additionally, Novartis's report is noteworthy for its consolidation of financial and nonfinancial information.

pharmaceutical sector, intensely competitive and highly sensitive to proprietary information, has resisted this initiative. Though most of the major firms produce some type of nonfinancial “sustainability,” “social,” or “citizenship” report,⁹³ it is rare that such reports represent leading-edge disclosure standards.

The irony of this situation is that drug companies, more than most other industries, represent a sector whose business encompasses quality and quantity of life. However skewed its priorities and practices are toward competitive advantage and near-term financial gains, it retains the responsibility of preserving the lives of millions. Yet by current disclosure standards, either at the specific drug or corporate level, it is difficult to find leading practices. The recent stories of antidepressants and arthritic drugs are a reminder of how serious the shortfalls are and how far the industry has to go before meeting emerging global expectations and standards of disclosure.

VIII

CONCLUSION: THE WAY FORWARD

All signs point to the continued emergence of social, environmental, and economic disclosures as integral and indispensable components of corporate responsibility. This evolution, still little more than a decade old, remains a work in progress in terms of scope, scale, and content. It reflects the character of financial disclosure a half century ago—formative and experimental.

For companies operating in global markets, a shift in perception and practice relative to disclosure is clearly discernable. In the 1990s, a few pioneering companies in North America and Europe, often prompted by bad press surrounding environmental and human rights incidences, began publishing nonfinancial reports.⁹⁴ These early innovators were followed by hundreds more who began to see such reports as an emerging best practice. By 2003, more than 1500 companies had adopted the procedure, and each year witnesses a steady increase in numbers.⁹⁵ This trend continues today.⁹⁶

As nonfinancial reporting swiftly moves from extraordinary to exceptional to expected, the case for global standards becomes more compelling. Full and balanced disclosure is taking its place alongside labor, environmental, and human rights as a generally accepted universal norm for business. Like these rights, the “right to know” is part of doing business in the twenty-first century. Integration of global capital markets, the capacity of information technology to virtually instantaneously transmit both good and bad news, and sales of products and services worldwide create both a business and an ethical foundation for full disclosure.

93. Organisations, *supra* note 69.

94. Polaroid Corporation and Royal Dutch Shell are examples of early reporters spurred by, respectively, environmental and human rights issues.

95. ACCA, TOWARDS TRANSPARENCY: PROGRESS ON GLOBAL SUSTAINABILITY REPORTING 2004 8 (2004) available at http://www.accaglobal.com/pdfs/environment/towards_trans_2004.pdf.

96. KPMG, *supra* note 56, at 3–5.

The case of pharmaceutical firms forcefully illustrates this point. The handful of firms that dominate global markets sell their products worldwide. There simply is no justification for multiplicative disclosure standards across countries or regions. Critical information on company R&D programs, drug trial activities, and marketing practices is of equal interest to American, Japanese, and South African consumers, investors, and other company stakeholders. As the recent antidepressant and arthritis drug cases reveal, the consequences of company decisions, like the companies themselves, know no frontiers.

The contours of a generally accepted disclosure framework are identifiable at this juncture, especially at the generic, cross-sectoral level. At the same time, details of sector-specific disclosures remain fluid. For pharmaceutical companies, for example, when and in what form should drug trial information be disclosed? In what form, qualitative or quantitative, should lobbying activities, funding of academic institutions, and relationships with medical professionals be disclosed? Achieving the levels of rigor and comparability essential for credibility will take time. The issues need to be articulated, the indicators defined, and the measurement protocols developed.

Company stakeholders are a diverse and dispersed group, but all have a right to know what is relevant to their decisions as consumers, investors, workers, and community members. The consequences of deferred, incomplete, or inaccurate information are too evident and too frequent. The greater the social, environmental, and economic footprint of the sector, the more urgent is the need to move rapidly toward generally accepted disclosure standards at the global level.

“Information is the Best Medicine” reads the headline of a recent commentary on the antidepressant controversy.⁹⁷ This fundamental truth must be translated into steady progress toward global disclosure standards in pharmaceuticals and, no less urgently, in all business sectors that constitute the twenty-first century global economy.

97. John Abramson, *Information is the Best Medicine*, N.Y. TIMES, Sept. 18, 2004, at A27.