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ON THE NEED FOR GREEN ACCOUNTING

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ABSTRACT

It is time to argue that it is imperative for green accounting to be the norm for financial reporting. Green accounting requires the disclosure of environmental impacts of corporations’ activities as a component of financial reports. Green accounting disclosure is a vital part of information needed for investment decisions that can help create a sustainable economy. The U.S. Securities and Exchange Commission’s (SEC) efforts to require such disclosure will be examined and recommendations for more adequate disclosure will be discussed.

I. INTRODUCTION

Investors’ clamor for disclosure versus corporations’ recalcitrant response is more a war than a game. The battle is not yet over. Note the following 1899 exchange between Commissioner Thomas Phillips (of The Industrial Commission) and Henry O. Havemeyer, president of the American Sugar Refining Company. Commissioner Phillips said:

You think, then, that when a corporation is chartered by the state, offers stock to the public, and is one in which the public is interested, that the public has no right to know what its earning power is or to subject them to any inspection whatever, that the people may not buy stock blindly?

Havemeyer:

Yes; that is my theory. Let the buyer beware; that covers the whole business (Brief, 1987, p. 144).
The public was losing the war until the depression of the 1930’s when the Federal government entered the battle as an active combatant. Pointer and Schroeder have written:

A popular misconception is that the securities legislation in the United States resulted from the severe decline in the prices of securities that occurred in 1929 and the ensuing years of financial stagnation. Actually, the financial difficulties of the 1930’s only provided the “last straw…” (Pointer and Schroeder 1986, p.9).

The Securities legislation to which Pointer and Schroeder were referring were the Securities Acts of 1933 and 1934 which gave birth to the SEC. The Acts of 1933 and 1934 had two basic objectives:

- Require that investors receive financial and other significant information concerning securities being offered for public sale; and

- Prohibit deceit, misrepresentation, and other fraud in the sale of securities (SEC, 2002). (author’s emphasis)

This study examines the need for disclosure of environmental impacts of SEC regulated corporations. It addresses the problem that commercial firms while pursuing worthwhile objectives, i.e. creating monetary income, cause damage to the environment that was unintended, and it is unreported in the financial statements.

**II. GREEN ACCOUNTING**

The income computed with regard to maintaining natural capital is real, or, “income in fact” in that it is sustainable. Accounting techniques used to help measure sustainable income have been termed “green accounting.” Credit for coining the phrase has been given to Professor David Pearce in a report commissioned by the British Department of the Environment in 1989 (Wordspy, 2003). The World Bank has advocated “green national accounts” to be used at the policy level. Such accounts are more expansive than GNP (gross or net national product) and include such information as ‘genuine savings’ and ‘Eco-Domestic Product’ (World Bank Group, 1996, p.1).

Green accounting is not merely a footnote in an annual report which states that the company’s policy is to comply with all environmental laws. Nor is it showing a
liability for getting caught for non-compliance and/or disregard of laws. As presented later, green accounting requires disclosure of information that is gathered and internally known by management but is not generally disclosed in a financial context.

There should be little disagreement that income, as currently measured by accounting, is one of the main carrots after which investors chase. Hawken, Lovins & Lovins have stated:

> We need, incrementally but firmly, to transform the sticks and carrots that guide and motivate business. That means, in essence, revising the tax and subsidy system...that determines social, economic, and ecological outcomes by applying politically selected subsidies and penalties. ...It is our belief that we already know how to “invest” in natural capital, thousands of groups are doing it around the world. ... Also, perverse subsidies...confuse investors by sending distorting signals to markets.... Hawken, Lovins & Lovins, (1999, p.159).

### III. DISCLOSURE

The SEC has the authority over the signals that are disclosed by corporate America which govern the flow of scarce capital. The SEC has depended upon the Financial Accounting Standards Board (FASB) and the American Institute of Certified Public Accountants (AICPA) to set accounting and audit standards. The dependency is not well founded. For example, the Comprehensive Report of the Special Committee on Financial Reporting issued by the American Institute of Certified Public Accountants, (“AICPA”), included the following caveat:

The following summarizes users’ needs for information, not the Committee’s recommendations to improve business reporting...business reporting cannot—and should not meet all users’ needs for information. ...the Committee’s study, ...applies to certain types of users...that follow fundamental approaches and that cannot compel a company to produce the information needed for analysis.... The objective of business reporting is to provide users with information that is helpful in deciding whether and to what price to commit, or continue to commit, resources to a particular company (AICPA, Meeting, 2002, p.1).

Nowhere in the study’s conclusions of user needs is there specific mention of environmental aspects of the company’s operations. Instead the study seems to have discovered that what is needed is what is presently presented—a balance sheet, an
income statement, and a cash flow statement coupled with management’s public relations geared discussion.

The study indicated that financial statements are an excellent model for capturing and organizing financial information… no user suggested that financial statements should be scraped and replaced with a fundamentally different means of organizing financial information” (AICPA, 2002, Meeting, p.9).

Disclosure of relevant information by which investors can make prudent decisions is wrought with subjective judgments. What is relevant to one may not be to another. Investor goals may differ and also their level of education (i.e. ability to understand the signals sent). As McLuhan and Fiore (1967) have observed, “societies have always been shaped more by the nature of the media by which men communicate than by the content of the communication.” They also noted that, “the alphabet and print technology fostered and encouraged a fragmenting process, a process of specialism and of detachment” (McLuhan, 1967).

The SEC not only has to make the rules of disclosure but also has to act as judge when questions arise. Also, the SEC only has about 100 lawyers to study the disclosure of 17,000 public companies. (Fortune, 2002, p. 68) The Sarbanes-Oxley Act of 2002 did, however, provide the budget for the SEC to add another 200 staff member.

One thing that is certain however is that disclosure is not limited to accounting reports. “Investors who purchase securities and suffer losses have important recovery rights if they can prove that there was incomplete or inaccurate disclosure of important information” (SEC, 2002, p.1).

Disclosure of all environmental matters may not be within the realm of accounting but that does not preclude the SEC from being responsible for its disclosure. The Security Acts of 1933 and 1934 included disclosure of, “…other significant information” as a responsibility of the SEC.

But what of disclosure of environmental, i.e. non-exchange transactions, which do not fall into the traditional realm of accounting? Is such information not significant? To one investor the only important information concerning environmental aspects of a business may be, “How did getting caught and fined affect the bottom line?” To another it may be: “What steps and related costs incurred, did a company take to maintain or improve the environment?” Yet, another may want to
know the exposure of a company to future claims. Another may want to know the quantity of pollutants a company emitted.

Disclosure of financial matters in one report and environmental matters in another does, in fact, foster the thought that they are unrelated. SEC Commissioner Roberts, in a 1995 speech, touched on this issue when he said, “My sense is that the disclosure in these [separate environmental reports] may be of higher quality than the disclosures in financial statements and SEC disclosure documents. The two should be consistent.” (p.5)

Several issues are raised by his comments:

1) What should a company disclose concerning its manufacturing process and products to the interaction with the environment?
2) What are the environmental disclosure restrictions, or limits, within financial statements?
3) Why is the SEC not leading the way in requiring environmental disclosure?

The question of course, is to which group the SEC responds as to disclosure requirements and what form should the disclosure take? All such environmental impact disclosures surely fall into the realm of, “other significant information” because environmental capital is basic and life supporting.

IV. THE ROLE OF THE U.S. ENVIRONMENTAL PROTECTION AGENCY (EPA)

The National Environmental Policy Act of 1969 (sec. 101) provided the justification for the SEC to require companies to disclose environmental consequences of their operations. The Act declared it to be the policy of the U.S. Government, in cooperation with local governments and other public and private parties to create conditions under which man and nature can exist in productive harmony. Furthermore, the Act requires all agencies of the federal government to be involved in the effort. It is not unreasonable to state that the SEC falls under the status of being one of “…all agencies of the Federal Government.” One of the requirements of the law is that, “unquantified environmental amenities and values may be given appropriate consideration in decision making…” (EPA, Sec. 103).

Given the broad scope of the congressionally declared purpose of the Act it is certainly reasonable to assume that environmental information is a necessary ingredient of individual and organizational capital decisions. These decisions directly
impact the economic aspect of “…harmony between man and his environment….” and “…the general welfare.”

V. ENVIRONMENTAL DISCLOSURE

Who has the responsibility for adequate environmental impact disclosure? Does it rest with public minded corporate executives who think like Henry O. Havemeyer of American Sugar Refining Company, does it fall upon the SEC or the EPA, or perhaps the accounting profession?

What is at the heart of the question, however, is not mere opinion. The real issue is whether there is a “real” economy or simply the nominal (symbolic) or political economy. In short, can one paint pictures of well-offness with numbers and thereby create the reality of well-off?

Just as there is a reality of nature there is a reality of economic well-being. The reality is not in the number of toys or gimmicks that a society produces. The reality is the need to maintain a sustainable life support system, the major part of which we refer to as Mother Nature, the Good Earth or simply the environment. When one damages the life support system there is no way to manipulate numbers or take political polls to change the reality of a non-vital environment.

By any measure, information concerning damage to the environment by the production of a product deemed “needed” by those who choose to finance the company creating the damage is relevant “other significant information.” The relevancy rests upon coping with reality instead of illusion caused by numeric manipulations.

Six general types of disclosure a company can make regarding environmental issues are:

1) Physical quantitative data- i.e. quantities of chemical waste emitted. The waste may affect air, water or soil. The waste may or may not be known to harm animal and/or plant life or the general atmosphere.

2) Environmental liabilities such as monetary aspects of complying with, or avoiding, laws and regulations governing environmental matters. These would include costs incurred, liabilities arising from a variety of reasons and various reporting requirements.
3) Costs of complying with laws and corporate policies.
4) Costs avoided (benefits) by delayed compliance or moving operations to more “friendly” locations.
5) The potential hazards of using and disposing of the company’s products.
6) The non-quantified “eye of the beholder” aspects of environmental interaction.

This area opens up the area of value judgments and could become argumentative. Because this paper is limited to environmental disclosures, the more proper question may be: What do investors need to know about a company/environment in order to make an informed investment decision? Or, what does the SEC assume investors need to know concerning a company/environment in order to not be deceived when making investment decisions?

VI. DISCLOSURE OF QUANTITATIVE DATA

Disclosure of quantitative data regarding emissions and waste is of course what really counts. The dollar representation of such is useful for economic decisions, but it is the physical quantities of pollution that cause the damage.

As an example of such data one may consider IBM (a company which may be thought of as “clean”). The data is reported to the EPA, but of course does not find its way into IBM’s financial reports. The information however is available to the public on-line at www.epa.gov/region01.pr.2001.apr.010412.html. In the report for Vermont covering 1998-1999, IBM was at the top of the list of the “Ten Largest Pollution Emitters in Vermont…” The “clean” company dumped 216,446 pounds of toxic waste into the environment. It seems reasonable that an informed investor would be curious as to the amount of waste a company is dumping in his/her community before investing in the company. Yet, the SEC does not consider this as “other significant information.”

VII. ENVIRONMENTAL LIABILITIES

At first blush the term liability seems simple and clear. Yet like many terms a technical meaning gets murky as experts try to define it. SEC Commissioner Levitt stated in 1998, “I encourage a prompt resolution of the FASB’s (Financial Accounting Standards Board) projects, currently underway, that should bring greater clarity to the definition of a liability” (p.5). Liabilities represent the dark side of the environmental disclosure in that they arise from either doing nothing or violating laws.
The reason for the SEC’s concern, is that disclosure of environmental liabilities forms the basis of their disclosure requirements. It’s interesting to note that while the SEC was waiting for FASB to act the EPA took an active role in clarifying environmental liabilities.

In 1996 the EPA published the results of a study for which it had contracted with the title: Valuing Potential Environmental Liabilities for Managerial Decision-Making: A Review of Available Techniques. (Pollution Prevention Division (MC-7409) Office of Pollution Prevention and Toxics). The report states, “The emphasis in this report is on techniques for placing a monetary value on potential, preventable environmental liabilities.” (p.2) However, the report continues, “This report is not intended to address the recognition or reporting of environmental liabilities in financial statements or disclosures subject to the jurisdiction of the Securities and Exchange Commission (SEC) or in accordance with Generally Accepted Accounting Principles (GAAP)” (p.4).

In other words, there are (maybe) techniques to measure environmental liabilities for internal decisions (including ways to get around being liable) but the information is not necessarily disclosed to investors. The authors of the study point out that the term:

…environmental liabilities is used to refer to the potential for fines, penalties and jail terms for violations of environmental laws…[it] also frequently serves as short-hand to refer to clean-up obligations under the federal superfund and state counterpoint laws for contaminated sites…Another common usage is to label the costs of complying with regulations as “environmental liabilities.” For purposes of the study an environmental liability “…is a legal obligation to make a future expenditure due to the past or ongoing manufacture, use, release or threatened release of a particular substance, or other activities that adversely affect the environment” (p.8).

According to the study there are several broad categories of such liabilities. They are:

- Compliance
- Remediation
- Fines and Penalties
- Compensate-private parties
- Punitive damages
- Obligations to pay for natural resources damages-publicly “owned”
Traditionally of course liabilities (by whatever subtle definition) have been disclosed on the balance sheet. Contingent and off-balance sheet liabilities have been more troublesome. The SEC has adopted a rule to require that contingent liabilities be reported in the Management's Discussion and Analysis (MD&A) section of corporate reports (SEC, 2003).

Separating liabilities into two parts is likely to distract readers into thinking that some are real, and some are not. Most troublesome of the proposed rule, is that no disclosure need be made unless they exceed the foggy threshold of a, “material effect in the company’s financial condition” (SEC, 2002, p. 10).

How has the SEC responded to the opportunity and requirement to increase environmental disclosure needs of registrants? While the EPA was passed into law in 1969 it was not until 1993—twenty-four years later—that the SEC issued Staff Accounting Bulletin 92 (SAB 92) which deals only with the contingent liability segment of environmental disclosure.

The significance of SAB 92 is that “…the Staff’s view that contingent liabilities must be displayed on the face of the balance sheet separately from amounts of claims for recovery from insurance carriers or other third parties (Roberts, p.2).

In short, when a company gets caught for abusing the environment it must disclose the amount it may be fined separately from the amounts of the fine other parties (i.e. insurance) may have to pay. Prior to SAB 92, the amounts could be netted. In fact, because ultimate payment of the fine was “contingent” under the standards of the Financial Accounting Standards Board—which determines Generally Accepted Accounting Principles (GAAP)—disclosure was seldom made.

Moreover, the SEC has also provided the same loophole that would result in disclosure not being made under the “requirements” of Regulation S-K. Regulation 229.103—the instructions of which states:

5. Notwithstanding the forgoing, an administrative or judicial proceeding (including, for purpose of A and B of this instruction, proceedings which present in large degree the same issues) arising under any Federal, State or local provision that have been enacted or adopted regulating the discharge of materials in the environment shall not be deemed “ordinary routine litigation incidental to the business” and shall be described if:
   A. Such proceeding is material to the business or financial condition of the registrant:
Is it reasonable to assume that a reasonable person would want to know how polluting a business is prior to “voting” to commit his/her capital to that business, or that the company’s cost associated with the pollution are material, i.e. greater than “…10 percent of the current assets?” Such a threshold can well be in the billions of dollars.

In his speech by then SEC chairman Arthur Levitt on September 28, 1998, he warned that in regard to the quality of financial reporting, integrity may be losing out to illusion. (p. 1) He went on to discuss the subject of materiality by saying,

I reject the notion that the concept of materiality can be used to excuse deliberate misstatements of performance… Materiality is not a bright line cutoff of three or five percent. It requires consideration of all relevant factors that could impact an investor’s decision (p. 5).

VIII. COSTS OF COMPLIANCE

Explicit costs of compliance for environmental laws or company policy include a wide range of expenses such as depreciation on equipment, legal fees, salaries etc. The individual expenses are generally not functionalized as a single number on the income statement. At times a total of these expenses is shown in the MD&A. For example, Dupont reported that, “In 2001 Dupont spent about $103 million on environmental capital projects…estimated pretax environmental expenses charged to current operations totaled about $550 million in both 2000 and 2001…” (Dupont 10K, p.1).

The impact of the environmental costs is lessened by not showing them as an item on the income statement. However, one must be appreciative that it was disclosed at all.

IX. COSTS AVOIDED

Costs mandated by regulation are similar to liabilities imposed by regulators. Both are grudgingly paid. When disclosed in the MD&A it is almost an admission that management does not consider the costs to be “real” costs of production i.e. they were not necessary except to avoid penalties.

Disclosure could also include the environmental costs which management had sought to avoid by deceit and relocation schemes. There is evidence that management computes such costs and may make various decisions on the basis thereof. Also at times the analysis leads to environment-friendly decisions. Of course, only the latter
The costs of avoidance which are not reported should also be known and considered by investors.

The premise for correcting the externalities market failure is to shift the cost of the externalities from the non-consenting parties back to the generator of the externality. Ensuring the generator bears the cost of the externality forces them to internalize these costs and factor them into their decision-making framework (Franco, 2001, p.4).

X. ENVIRONMENTAL HAZARDS OF USING PRODUCTS

Pharmaceutical companies are required to disclose possible side-effects of their products. However, with the notable exception of tobacco companies, producers don’t seem to be concerned about the consequences of the use of their products. The SEC does not require the disclosure of environmental problems caused by the use of products. One reason may be that the disclosure would be of concern to users and not investors. Evidently investors, like drug pushers, are not expected to be concerned with the use of their product. Again, it seems reasonable to assume that environmental damage by use is as important as damage by production and is, “other significant information.”

XI. DISCUSSION

An example of the weakness of the SEC’s disclosure authority is further evidenced by the case of Lee Pharmaceuticals, a California Corporation. The case provides an interesting—if depressing—insight into the teeth the SEC has concerning environmental disclosure. Beginning in 1987, Lee was ordered by the California Regional Water Quality Control Board to investigate contamination on its property. Between then and 1996, Lee hired consultants to report on the matter, notified its insurance company of the estimated cleanup costs and was informed by the EPA that it was a “Potentially Responsible Party” (PRP) for Superfund Site cleanup costs. During the period of the fiscal 1991 through 1996, Lee made material omissions and misstatements in its filings with the SEC. What was the result of the administrative proceeding? Lee had violated eighteen rules of the SEC including failure to comply with GAAP, withholding information from its auditors, acting with scienter (knowingly) to not disclose its environmental liabilities, which were material. The firm hand of the SEC then…” ORDERED, consistent to section 21C of the Exchange Act, that Lee cease and desist from committing or causing any violation and any future violations…” of the sections it has violated (SEC, (1998) p. 12, 13). In short, don’t do it again. All of this was eleven years after the problem surfaced.
On the other hand, The World Bank (1996, b) evidently thinks that environmental disclosure is a critical ingredient in economic development—though the AICPA does not. For example:

Environmental performance indicators have taken on a key role in many countries. Natural resource and environmental accounts coupling to economic accounts and indicators, promise to provide policy makers with measure of progress towards environmentally sustainable development by highlighting the critical role that policy failure and market failure play in environmental degradation (p.1).

The Economic and Social Research Council (ESRC) noted that “It seems to follow that environmental destruction is virtually inevitable given our present accounting systems” (ESRC Briefing, b, p.1). The same Briefing reported that by 1996:

Research in this area has: examined and refined companies’ investment appraisal systems; re-worked decisions on closing and locating plant; exposed the short-term bias which often works against environmental investments; explored ethical investment issues; and demonstrated how accounting can be used to encourage greater energy and waste disposal efficiency (ESRC, p.1).

Also, of all the recent research it was noted that the, “…most exciting area of development-and the one offering perhaps the greatest challenge-relates to accounting and sustainability.” Sustainability is nothing more than “not dipping into capital for current consumption.” In other words, one must maintain one’s capital before there is income which can be currently and sustainably consumed. The matter, therefore, requires that “real” income (increase) be measured. Accordingly, the costs associated with maintaining all capital needs to be counted before there is a real net income. In order for there to be a meaningful income two basic things must exist. First, a reliable and consistent measurement standard must be established. Second, “all capital” must be identified; maintenance efforts must be identified and quantified. But, “Accounting will measure this process only insofar as the elements carry a price. Most often environmental elements do not carry a price and can therefore be ignored” (ESRC Briefing, b, p.1).

The main shortcoming of accounting (to date), with disclosure issues relating to environmental matter, is that is has not focused on the income—capital maintenance issue. Rather, the focus has been with measurement and disclosure of liabilities. Of course, environmental liabilities generally only arise after the polluter gets caught. In other words, accounting disclosure has focused on the negative.
The fragmenting of financial and physical information gives the illusion that the environment is a thing separate from the economy. In other words, economic capital does not include the environment. Because the EPA and SEC are distinct federal agencies it may be easy to conclude that the activities each regulates are also separate. On the one hand, the EPA requires environmental information from certain companies. The information generally concerns quantities of pollutants discharged into the air or water. Environmental impact statements may also be required prior to an entity conducting impact-type activities or projects. Much of this information is public when requested from the EPA.

The SEC, of course, requires financial information from all of the companies subject to its jurisdiction. This information is also public when requested. Financial data is economic, and one is led by fragmented thinking to conclude that the economy and environment are only related when regulation infractions cause economic liabilities to get to the SEC realm of regulation.

Financial statements include man-made capital consequences – i.e. depreciation of long-term assets, maintenance costs of the same assets for example. These same statements only disclose environmental capital consequences to the extent the firm is liable for damages under the SEC and GAAP rules. Such liabilities may have little association with the environmental damage done or the true economic costs of the damage.

Unlike persons, a corporation has no inalienable rights. A corporation is a publicly created “artificial person.” Thus, the public has created a regulator to dictate (with enforcement powers) what the corporation must disclose for the public good. Has the SEC been effective in its disclosure requirements? It seems the SEC is merely another participant in the grand illusion of symbolic well-off ness expressed in monetary terms?

XII. CONCLUSION

The result of the lack of financial disclosure of environmental consequences (which may be positive but are generally negative) is the grandest illusion that SEC commissioner Levitt could have emphasized, it is that business income is always grossly overstated. Income (increase) that is real only exists after all of the capital that gave rise to it has been maintained. If the largest and most important capital-the environment-has not been maintained, nor even identified, how real is the resultant income? It is but an illusion.
The awareness that the world is in need of a “sustainable economy” if we are to live in the real world is the most important economic message that can be voiced today. We are so far behind, that what, in conventional terms, is called stagnation will be “business-as-usual” for many years. When a real environmental corrective program begins, the conventional income statements will create a downward slope. Such a pattern is not cause for concern, but jubilation. People will become aware that real-life economics are in process. The depressing news would be that “profits” are on the increase and people are unaware of the reason. The reason, of course, would be that companies have discovered more ways not to disclose their real costs.

The hope for the sustainable future is not with the political entities of the SEC or FASB. Rather it lies in what Franco’s paper was titled: “Corporate Disclosure: Opportunities to Harness Market Forces to Improve Corporate Environmental Performance.”

In short, the possible solution to the economic/environmental problem is also the cause of the problem—the market. With disclosure will come a more responsible allocation of monetary and human capital. Those who don’t disclose will have a more difficult time getting capital—hopefully it will lead to their demise. But, like the Big-Bang it will take a trigger.

As Walt Kelly’s famous cartoon character stated, “We have met the enemy and it is us.” Environmental disclosure will improve when we demand it. It will not be gratuitously provided by altruistic corporate executives, nor imposed by special interest regulators.

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