New Reporting Needs for a New Time

Accounting—Crisis or Crime?

Cost and price, but never value, are what balance sheets can tell you. 1

THE ACCOUNTING TRADITION

Then and Now—A Touch of History

The fifteenth century was a remarkable period in history:

- Leonardo da Vinci, the universal genius whose name has been revived beyond belief in the last few years, created great art and made impressive designs and inventions.
- Gutenberg launched a new technique for book printing. His invention changed the world, and made new forms of education, information and opinion-building possible.
- Christopher Columbus and Vasco da Gama made bold exploration trips to unknown lands and cultures and changed our perceptions of the world forever.
- Copernicus defied the official truth and put his life at risk as he stated that the earth circled around the sun, not the other way round.
- In 1494, Luca di Pacioli, math professor and Franciscan monk in Northern Italy, published a summary of the double entry accounting system, which entitled him to be named the father of accounting.

3

That Was Then—This Is Now!

No matter how much we appreciate da Vinci's contributions, we would not send his drawings to Sikorsky and ask them to build a helicopter from them.

While we recognize Gutenberg's invention, we do not print books today the same way as Gutenberg did.

We think highly of the pioneering spirit of the fifteenth-century explorers, but we do not use navigation instruments from the *Pinta* and *Santa Maria* to guide our space ships.

We respect Copernicus's courage and vision in giving us a new view of the world. Yet, today's astronomers and physicists have added entirely new aspects to how the universe works and looks.

Amazingly, 500+ years later we still use di Pacioli's accounting system to guide companies into the global, postindustrial economy of the twenty-first century.

"Buttons on Coat Sleeves"

Over the centuries, tons of academic discourses, detailed guidelines, and government regulations have been added to di Pacioli's 36 short chapters. Fifteenth-century goose quills, abacus frames, and leather-bound ledgers have been replaced by computers. Yet, the system we use is the same. This, in itself, is a tremendous achievement, which means that di Pacioli beats his famous contemporaries by a long shot!

Is it the same system? On the web site² of The Association of Chartered Accountants in the United States, John R. Alexander, founder of Net Gain, concludes a long, well-written article on the history of accounting with the statement: "Perhaps most surprising is how little bookkeeping methods have changed since Pacioli." Alexander also quotes accounting historian Henry Rand Hatfield, writing about bookkeeping techniques, "persisting like buttons on our coat sleeves, long after their significance has disappeared."

From the Only Legitimate Role of Accounting to "The Swiss Army Knife"

While we can understand the driving forces behind such initiatives as Sarbanes-Oxley and Basel II, we suggest that the most serious reporting problems cannot be solved by regulation or legislation. Neither will stricter supervision and harsher punishments of wayward CEOs, CFOs, accountants, or auditors be sufficient, even if such measures have a role to play. The crucial issue is not the rules of accounting. It is the exaggerated role of accounting.

Over the centuries, accounting has increasingly come to be used for applications far beyond what it was ever intended for. These extended uses or misuses of accounting are at the roots of many of the problems plaguing the global business community today. They have been exacerbated by the fundamental changes in how we do business in the twenty-first century.

Accounting started out as a specialized tool with one main function: to monitor business transactions. This role, keeping track of the ongoing transactions of a business, is also one that accounting still performs reasonably well. It is when we allow accounting to go beyond this role that it loses its contact with reality. When we start to assign additional meanings to income statements and balance sheets, beyond their function as corollaries of correct entering of basic data, accounting becomes a fallacy.

In the course of its existence, accounting changed from its simple brief of reporting business transactions. It was made to serve and support almost any function in business and the economy. It was seen as an instrument for "valuation." It was applied to decisions on strategies and tactics, used in forecasting, planning, analysis, investments, bank lending, insurance, company mergers and splits, risk assessment, and almost any other kind of business decision making. National and international legislation, taxation, lending and investment policies, and business and banking codes were built on accounting. Ratios based on accounting data have been used to rank and rate companies, with severe consequences. Accounting has been believed to serve equally well in defining the national economies of the biggest countries in the world as in describing the business health of the street-corner bike shop. It has been used to blow bubbles and spread smoke screens. Even limited questioning of the all-inclusive usefulness of accounting has been seen as worse than heresy by fundamentalists in the accounting community. Accounting gradually turned into an all-purpose tool, a "Swiss Army knife" of the business community.

At one time or another there may have been reasons for some of these added applications. In most cases, those reasons, whatever they were, have now either faded away or disappeared altogether, like once-living animals became fossils when their life pattern did not adapt to a changing environment.

"Use Only as Directed"

When doctors and pharmacists hand over prescription drugs that are supposed to relieve pain or bring a patient back to health again, they are anxious to ensure that the medication must be used only as prescribed. The best medication can be dangerous if taken without appropriate caution. Also, nobody should expect a drug to work wonders for any health problems it was never intended to cure. Using ever-so-good medication for the wrong purposes, with the wrong expectations and in the wrong contexts, involves risks. It can even be fatal. The same is true for many electrical appliances, chemical substances, or sophisticated tools and equipment that we use in farms, factories, and homes. Any substance or

equipment can be dangerous, or fatal, if used without appropriate caution. This is why manufacturers add strict guidelines and warnings to their products, often supported by government regulation in one form or another. Accounting is no different. It can be a good tool when used for the purposes it was intended for. Ample experience shows that other uses can be dangerous or even fatal.

A conclusion that is long overdue is: To save what is left of its shattered reputation, accounting should be led back to its only legitimate function, direct registration of business transactions.

Our economy needs and deserves other systems for other applications. Such in-depth functions as support of business decision making and relevant, transparent company reporting must be left to business-focused, before-the-fact systems, not finance-focused after-the-fact systems. We need systems that put relevance above (apparent) precision and that give useful, reliable, and timely information about the fundamentals that move companies today.³

Reliability and Relevance

Conventional trust in accounting rests on the assumption that published data are both reliable and relevant. The accounting scandals over the last several years have put the spotlight on some of the overall shortcomings of accounting, in both these regards. The records of the SEC and other supervisory authorities show that published data of a big proportion even of highly respected companies are dubious, at best, and a result of management estimates rather than objective facts.

This chapter will deal mainly with the overall lack of reliability, and the next chapter mainly with the lack of relevance in the light of the dramatically different business situation in the twenty-first century.

"There Are Few Words More Reassuring to Investors Than Accountability"

The fact that accounting, as a tool for decision making, is in a crisis is hardly in doubt. It is moving from a situation of broad trust to a situation of being suspect, linked to some of the most dramatic economic crimes of our time. Is the word "misdemeanor" an acceptable term for a function that contributes to create losses to the tune of billions? A crucial question is: *Does accounting, in the extended way we use it, support accountability, or is it an impediment to transparency and accountability?*

CFO Magazine: "The Failure of Accounting"

We cannot claim authorship of the headline "The Failure of Accounting," although we would have liked to. We quote it from a source that has more

authority in these matters than we do: It was first used as the headline of an editorial of no less a publication than *CFO* magazine, as early as December 1994.

We accept that a lot of substance and proof (and guts!) will be required to criticize a system with as much clout and historic support as accounting. Fortunately (for us!), over the years that we have worked on these issues, the harshest aspects of our criticism have been increasingly vindicated. We started out suspecting that the accounting system was less than perfect, but we did not imagine that it was that bad. Only in the last four to five years, the media have supplied more material to support our criticism than anyone could have asked for. We will refer to some of this material on the following pages, but no single volume could ever accommodate all the documentation we have encountered.

The consequences of the failing or misused accounting system have been dramatic. Day-to-day decisions based on or influenced by accounting data have created losses in the range of hundreds of billions of dollars, if they can be measured at all:

- Disastrous mergers and acquisitions that have wiped out billions of shareholder assets
- Bank lending mistakes that have forced enormous write-offs, while neglecting the finance needs of deserving companies
- Misappropriated venture capital financing that destroyed shareholder value
- Misguided advice from financial analysts that has led to huge investor and retirement fund losses
- "Undue negligence" from big banks in the underwriting of bond issues for companies that went bankrupt soon after the issues
- Auditing and risk assessment processes that diverted board, manager, investor, and regulator attention from business issues to financial issues, such as "goodwill"

Case in Point—A History of Bubbles

The history of the world economy is a dramatic sequence of bubbles or drastic value swings, such as tulip bubbles in seventeenth-century Netherlands, the Parisbased Mississippi bubble, the London-based South Sea bubble in the eighteenth century, cross-national gold bubbles over hundreds of years, the big American railroad bubble in the mid-nineteenth century, twentieth-century real estate bubbles in Europe, Japan, and the United States, savings bank failures in the United States, currency bubbles in Russia, Germany, Brazil, Venezuela, and other countries, repeated stock exchange bubbles, IT, bandwidth, and telecom bubbles as well as the Sunbeam, Enron, Worldcom, Parmalat, Global Crossing, and other corporate disasters of our time.

Somewhere behind all these and many other bubbles there seems to be a common denominator: too many people putting too much confidence, for too long, in data provided, rightly or wrongly, by "good old" accounting—data that told a manipulated and incomplete story. In all these, and a number of other "bubble" cases, accounting, for a time, provided an apparent rationale for something that proved to be far from rational. The hot air that inflated the bubbles was the misguided trust that accounting commanded and still commands among accounting fundamentalists. The bubbles were largely accounting bubbles.

Case in Point-Red Flags

A Reuters news release, signed by Christopher Noble and relayed on AOL February 13, 2001, had the alarming headline: "Corporate Accounting Woes Raise Red Flags." The news release summarized "a rash of accounting problems" under investigation or review by the SEC and other financial supervisory bodies. The companies mentioned were not from the back alleys of the business community. They included top-of-the-line companies, such as Lucent, Xerox, Cendant, and Belgium-based Lemout & Hauspie. The alarm bells sounded after several other similar cases had been brought to the attention of the investing world. The article quoted big-scale investors who do not feel that these revelations were the end of the story; rather "they expect more of this to happen, not less."

Unfortunately, as we all know, they have been proven right. "More of this" has indeed happened. We read about new cases practically every day.

Those who still believe in accounting are naturally surprised when red flags go up. For those who have seen the warning signs for a long time, the news is not surprising—only depressing—and challenging, in that they confirm the urgent need for change.

An obvious consequence is that both the general public and the business community all over the world experience a lack of trust in accounting and related disciplines, such as auditing. Accounting has been used extensively over the centuries for purposes far beyond its capacity. It has been seen as a basic element, a pillar stone of the whole economic system, which means that when accounting is hit by this lack of trust, it affects the public trust in the business community in general. The loss of trust is reinforced by the fact that too many banks and other companies have stretched the limits of their reporting practices beyond what has been acceptable by supervisory bodies, such as the SEC and FASB in the United States, and their equivalents in other countries.

Accounting has simply proven to be too easy to adapt to shoddy practices and misleading presentations. By being too accommodating to dubious procedures, accounting, and its once-trusted guard and watchdog, auditing, have fallen from the position of credibility and accountability that the general public and the busi-

ness community should be able to expect from these professions. Illegal, unethical, or borderline practices may hopefully still be in a minority, but the questions surrounding accounting are too many and too serious to keep the lines of trust as strong and clear as they should be.

THE ETHICS OF ACCOUNTING— ILLEGAL, IMMORAL, OR INDIFFERENT?

"Lies, Damned Lies and Managed Earnings"

Fortune, in its issue of February 19, 2001, quotes an example of "managed earnings," managed in order to present consistent quarter-to-quarter earnings growth from the very icon of management perfection, General Electric. Andy Serwer, the writer of the Fortune article, cautiously says: "This kind of earnings management isn't illegal, maybe not even immoral. The concern, rather, is that it is not transparent." For details on this case, Fortune refers its readers to the fortune.com archives, under the telling headline "Lies, Damned Lies and Managed Earnings."

In her Market Watch column in the *New York Times*, September 20, 2001, Gretchen Morgenson writes: "The momentous earnings reported by many companies in recent years may have been *digitally remastered* [our emphasis!] to include a lot of hype, embroidery and fluff."

Case in Point-Sunbeam

One of the early cases of "managed" accounting in the wave of dubious cases in later years is the story of Sunbeam.⁶

According to several reports, Sunbeam, under CEO Al Dunlap, ran a severe case of book-cooking. The income statement was "managed" to an extraordinary extent. Commissions to sales reps were withheld, bills went unpaid, vendors were coerced into accepting part payments. Deep product discounts made retailers buy more than they could sell within a reasonable time frame, long credit terms were granted, customers were pre-billed, meaning that Sunbeam booked items that would have been sold in the future as if the sales were made at present. It was an unusually clear case of accounting used to disguise or confuse real business. As a consequence, Sunbeam lost valuable intangibles, such as a loyal management team and a functioning Human Resources Department. It also destroyed important day-to-day resources, such as its computer systems, to the point that the company could not even bill its customers.

Early in 2001, the SEC sued Al Dunlap. In September 2002, Dunlap agreed with the SEC on paying a fine of \$500,000, at that time a record amount for settling an accounting case.

Al Dunlap's efforts to save Sunbeam at all costs may have had noble motives. Even so, the means used to reach such goals offered a lasting example of the shortcomings of accounting, or, rather, the ease with which accounting can be misused.

Case in Point — Xerox

The case of Xerox in the 1970s and 1980s, showing excellent profits as it marched, whistling and humming, toward disaster, is well known in management literature. Accounting-based reporting failed to show that profits did not come from happy, satisfied customers. The earnings were based on repair service of faulty copiers. When competitors came in with copiers that did not need a lot of repair, tired customers took the opportunity to jump to the higher-quality products and left Xerox in the doldrums.

What adds to the injury is that, once a company has fallen from glory, it can be very hard to regain a leading position. This is shown by Xerox's ongoing problems, some of which, although not all, are based on shortcomings in accounting. After pressure from the SEC, these shortcomings, reported to have inflated revenues by no less than \$3 billion between 1997 and 2000, were recognized by the company, though without admitting any guilt. The company agreed to restate earnings for 1997–2000 and to review its accounting practices. It also had to pay a \$10 million fine. The financial reporting of Xerox was opaque. Business-focused reporting would have been more transparent.

Case in Point - Warnaco

According to reports in respectable business media, Warnaco, a company in the fashion business, seems to have stretched the limits of accounting beyond what is acceptable, even with a very broad-minded approach. Positive earnings reports from ongoing operations fooled many seasoned analysts. The seriousness of the adjustments for "nonrecurring" charges made in the footnotes was shrugged off, even when those charges "recurred" time and again. Regular business costs were booked as nonrecurring charges, insurance reimbursements booked as regular revenues, restructurings, which in our time are ongoing adaptations to constant changes in the business environment, treated as special charges, discrepancies between announcements for the general public and the stricter 10-K reports, pointing to a willingness to use the weaknesses of accounting by stretching the standards.⁷

In June 2001, Warnaco filed for bankruptcy under Chapter 11.

Are These Cases Unique?

Sunbeam, Xerox, and Warnaco are three cases of managed earnings—"digital remastering" of accounting that have come under SEC investigation—although it can be argued that they are not necessarily worse or more dramatic than many others.

It would be somewhat comforting if we could say that these cases are exceptional. Unfortunately, it does not seem so. New cases of questionable or outright deceptive accounting are revealed practically every day. A big number of cases are reported—and even more cases are probably not reported—to supervisory and regulatory bodies in many countries. A complete list of examples would be hard to compile and too long to publish.

While the Sunbeam story may be exceptional in its way, it is far from unique. The SEC has boxes of similar cases in their files. The Enron and Worldcom cases may be exceptional through the amounts and the number of people affected. Another example is Rite Aid, which was reported, in *Fortune*, August 14, 2000, to have overstated its earnings for 1998 and 1999 by a (then!) shocking \$1.6 billion!

Cases in Point-Enron

Among the hundreds or thousands of cases, Enron is one of the best examples of how strongly the "valuation," in the sense of the current stock price, of a company reflects market perceptions, "the eye of the beholder," rather than any absolute and intrinsic value criteria. At the peak of Enron's market capitalization in early 2001, confidence in management and company performance ran high, resulting in a stock price above \$80. Then came opinions and fears—rather than the reality—of unfavorable trends in natural gas prices and an oversupply of electric power. But more than that, in the eyes of many observers, the cut by two-thirds of the Enron share price in the nine first months of 2001 can be seen as the result of a credibility gap. In addition to a massive management exodus and heavy insider selling, the New York Times Market Watch column of Sept. 9 2001, lists a typical range of "indecipherable" accounting practices, "sketchy" disclosures of important relationships, and reporting practices that make it "essentially impossible" to understand Enron's statements. Other commentators depict its financials as "dim on the opaque side." In November 2001, the company acknowledges that there was a reason for the credibility gap: For years it had overstated earnings, underreported debt, and kept serious financial and structural problems hidden from shareholders and other stakeholders. In an SEC filing, it admits that financial statements from 1997 through the first half of 2001 "should not be relied upon."

The company tamely acknowledged the credibility problem and promised, "We are looking at a lot of ways to give our investors more information." Hopefully, it aimed at delivering not only more information, but more relevant information than traditional accounting provides.

In November 2001 the stock dropped below \$10 from its \$90 peak and ended up being submitted to a takeover bid by Dynegy, a much smaller company. Dynegy later withdrew the bid, leaving Enron to sort out its own problems, eventually through a record-breaking bankruptcy process. The share price finally ended well below \$1. The rest is history, a history that will no doubt be amply recorded in books and Harvard-type case stories.

More than anything else, the fall of Enron is a reflection of lost confidence, in the board and management of the company, but also in the accounting system. Its transactions and reporting have received much attention, and rightly so, it seems. But Enron is far from alone. Just as when epidemics break out, the individual case is a signal that should release concerns and countermeasures, before the development gets out of control. Enron and its executives may be to blame, but so is the accounting system itself, for being so malleable as to permit blatant misuses.

A Wide Range of Methods for Misrepresentation

The Sunbeam case presents examples of all kinds of accounting malpractices. It may be exceptional in its apparently complete disregard for all honesty standards. Yet it shows how ineffective conventional accounting is in making consistently trustworthy presentations of reality. The ambition for accounting need not even be to provide "full disclosure," just reasonably honest disclosure.

The methods used to fool readers of company reports are almost as many as the cases. Under euphemisms such as "creative accounting" or "digital remastering" the misrepresentations use many techniques, more or less visible. Some of the practices are even seen as common procedures. The following is not supposed to be a complete listing of deceptive methods, nor should it serve as a training session in accounting fraud. It is only a selection of some of the more frequent practices listed just to show the broad variety of methods to destroy transparency that are available in the accounting toolbox.

Examples of unreliable accounting and reporting practices used by companies, small and big, include for instance:

- Expenses, sales, deliveries, returns shifted forward, backward, highlighted, or swept under the rug
- Expense items labeled "nonrecurring," although coming back, year after year
- Ownership, and the responsibility that should go with it, fiddled away through mazes and confusing "Russian Doll" setups
- Dissolving reserves, with incomplete reporting, inflating the income statement and boosting the bottom line
- Possible, but highly uncertain, future revenues recorded as realities today
- Banks padding their earnings by not making adequate bad loan reserves
- Other companies neglecting or misreporting doubtful accounts, loans, inventories, and reserves
- Avoiding formal consolidation, despite the reality of tangible and obvious management and board links
- Start-up costs, research and development costs, and so on tucked up out of the range of the income statement
- One-time gains allowed to boost regular income statements
- Regular operational losses reported as restructuring or nonrecurring charges
- Earnings per share manipulated by accounting tricks
- Pro forma earnings reporting,⁸ providing a second set of data, excluding certain forms of costs, such as "one-time charges"
- EBITDA showing earnings before interest, tax, depreciation and amortization, a picture that presents results or cash flow from operations in a way

that cannot easily be interpreted by outsiders and sometimes not even by insiders

- Insurance policies—"finite insurance" or "financial reinsurance"—that artificially beef up a company's financial statements
- · Vendor or customer financing without appropriate disclosure
- Companies changing accounting principles from year to year, making it hard or impossible to see a real pattern
- Ineffective "peer reviews" (one accounting firm reviewing the work of another firm): Few or no big accounting firms have ever issued a negative report after a peer review.
- Options, usually offered to top executives, mentioned in small footnotes in financial statements, not booked as an employee cost item on the income statement, as many advocate. (The technique has been called a stealthy transfer of wealth from the shareholders to corporate management, a sort of negative Robin Hood process.)
- Pensions or warranty liabilities reported "creatively" or not at all⁹

To these shoddy reporting practices should be added the frequent cases of distortion, intended or not, in corporate annual and quarterly reports through graphs and charts that manipulate the impressions that data might provide by eliminating appropriate scales, choosing baselines selectively, and other visual tricks 10

The fact that the range of malpractices is so broad, along with the wide range of companies under review, prove our point that "creative accounting" is not an exception. It seems to be so frequent as to put the burden of proof on the overall system of accounting. *Fortune* magazine, on the cover of its issue of June 24, 2002, used "failure," the same strong word as *CFO* magazine had used about accounting a few years earlier. The *Fortune* cover headline suggested that the wide misuse indicated a "System Failure."

Dishonesty Is Not Necessarily Intentional

The problem is not always that CEOs, CFOs, accountants, auditors, bankers, and others involved in these operations want to be dishonest. Many of them work as best they can to do a good, honest job and to follow laws and guidelines. GAAP, as many experts have called to our attention, offer endless possibilities for manipulation, still within the framework of the rules to be observed. A major problem is that the system itself, extended accounting, offers such generous opportunities for fraud, or misinterpretation, to use a kind word, that it creates impossible conflicts with the professional ambitions and conscience of those who are in charge.

Case in Point—Conflicts with the "Economic Reality"

The fact is that, even when accounting follows all rules, regulations, or guidelines, it easily turns out to be misleading, deceptive or, at best, irrelevant. In the cautiously balanced words of well-known financial analyst and investor Robert A. Olstein, 11 accounting creates "deviations between the statements as portrayed by the company and the economic reality." Olstein should know, having run a professional newsletter revealing accounting tricks performed by any number of well regarded, major companies. Accounting data simply do not adequately present a true picture of a company's present position and situation, let alone its outlook for the future.

How Could This Happen in the United States?

The examples discussed above refer mainly to companies based in the United States, which are considered to be as well managed and supervised as companies anywhere in the world. That these scandals happened in spite of comparatively tight regulations adds weight to the seriousness of the global problems we face.

Not that U.S. businessmen should automatically be seen to stand above their colleagues in the rest of the world, in terms of honesty or integrity. A system that is so easy to misuse as accounting invites shenanigans, wherever it is used. But the high frequency of accounting irregularities even in the United States is a cause of concern. After all, the United States has perhaps the best business education in the world, with some of the most excellent business schools, and an outstanding record of Nobel economy prizes. It has an independent judiciary system second to none. It has an active supervisory system, with the Securities and Exchange Commission (SEC) as a significant watchdog. It has high-level professional accounting organizations and standard-setting bodies, such as the American Institute of Certified Public Accountants (AICPA) and the Financial Accounting Standard Board (FASB), and now the Public Company Accounting Oversight Board (PCAOB), as well as a widely accepted set of guidelines, GAAP. It is also the country where the Institute of Internal Auditors (IIA) has its headquarters. And yet, even with all this on the plus side, the U.S. accounting system has failed to meet reasonable standards of accountability.

It does not take much imagination to realize that accounting in many other countries may be even more of a problem discipline—if discipline is the right word.

It is sad that accounting, traditionally an instrument that has been an icon and a foundation of the business community, has got so many nails driven into its coffin. The bell tolls not only for a few (okay, quite a few) individual companies, unfortunate enough to have been caught with their hands in the cookie jar. It tolls for a *system* that has permitted companies and other actors on the financial and business scene to deceive and confuse owners, the investing public, and other stakeholders for years.

A CASE FOR CHANGE

The Role of the Accounting Community

A number of pioneers within the accounting community, in research institutes and "think-tanks," in academia, in regulatory bodies, and in some of the leading auditing and consulting companies, have launched voices of concern about the shortcomings of accounting. They have even started to suggest changes in accounting practices to accommodate new needs. Interesting work has been done by the Brookings Institution, the American Enterprise Institute, the Cato Institute, the Stern School of Accounting at New York University, and the Wharton School of Economics, to mention just a few examples. Regulatory bodies, scared by the accounting scandals of the early 2000s, have proposed and enacted changes in accounting and auditing guidelines. However, most of these suggestions from the accounting and regulatory communities, even when they are labeled "radical," ¹² fall far short of what is needed.

This should not surprise anyone. It seems to be a general experience from practically all fields that radically new approaches seldom, if ever, originate within an established profession. Typically, those within a profession, whether it is engineering, law, medicine, philosophy, physics, mathematics, or whatever field, carry a heavy bag of professional traditions, from years of training and practice, sometimes even legislation. When they advocate change, they tend to come up with small steps of evolutionary change. ¹³ To achieve necessary revolutionary change, outsider input seems to be a necessary part of the process.

Thomas S. Kuhn, ¹⁴ scientist and philosopher, suggests an explanation that all scientific progress happens in jolts, in leaps and bounds, not as a step-by-step line of progress, in small steps. Kuhn's "jolts" are unpredicted and often unpredictable, and can be explained only in the aftermath, if at all. It could be that a dramatic change of a similar kind is overdue in the accounting profession.

James Gleick expresses the problem well in his important book, *Chaos*: ¹⁵ "A new science arises out of one that has reached a dead end. Often a revolution has an interdisciplinary character—its central discoveries often come from people straying outside the normal bounds of their specialties." Gleick has personal experience of this. He describes how the chaos and complexity concepts came up initially, and how they moved ahead through killing fields of entrenched opposition. Gleick shows how he and other pioneers of the new concepts were blocked from publishing their work in accepted scientific magazines and publications. Only after hard struggles did their ground-breaking ideas come to gain their place in the mainstream of science. When they were accepted, they revolutionized the disciplines of mathematics and physics, along with much of our present thinking, including management. The story about the painful birth process of the new complexity and chaos ideas has its parallels in practically all other disciplines, with pioneers from Copernicus and Galileo to Darwin, Einstein, and Chomsky.

Accounting has clearly come to a dead end in meeting many of the needs of our times. A more critical approach to the role of accounting is long overdue. Given the broad and deep changes at the roots of "the fourth economy," ¹⁶ a "jolt" or a revolution seems to call for interdisciplinary input "from people straying outside the normal bounds of their specialties." After 500 years, it is time to puncture the accounting bubble. But it would be unprecedented if the brunt of such a new approach, no matter how necessary and how obvious it is, were to come from within the accounting fraternity.

A Case for Heresy

We can understand that some people have problems criticizing a system as deeply entrenched as accounting. Fundamentalist thinking has a strong platform in many lines of creed. Questioning an established system, such as accounting, has a ring of heresy to many of those who have been brought up in its doctrines. To them, thoughts of abolishing accounting and accounting-based tools for valuation and decision-making must seem as repugnant as swearing in the church, or as questionable as many other dramatically different ideas, when they were new. Copernicus's first ideas of the earth moving around the sun were as heretical as the thought of a round, not a flat, earth. ¹⁷ Charles Darwin's theories of evolution took more than a hundred years to be generally accepted in his own home country (and they are still not fully accepted in public schools in all of the United States). Albert Einstein's theories on relativity took a long time to gain acceptance, even by those gifted enough to understand them. The concepts of complexity and chaos theory are still not quite endorsed everywhere.

It is understandable that many experts are looking for an ostrich method, sticking their heads in the sand rather than attacking the problem. Many have a well-intended wish for the problems to go away, or for an easy fix, say new IFRS or PCAOB guidelines, or new SEC standards, thus saving "good, old accounting." Such wishful thinking should not be allowed to stand in the way of an open debate about the appropriate role of accounting. The simplest and most basic reason to start the process toward realistic disclosure is the call for honesty, accountability, and responsibility. As an example, the SEC calls for openness and transparency in reporting; fair disclosure must go beyond formalities and timetables to the substance, the relevance at the core of basic reporting methods. Corporate governance apostles must take a deeper look than just board composition and procedures. Auditors must go beyond accepted processes and standards to a deeper level of questioning the validity of the reporting routines of companies they check.

What is at stake is the lack of symmetry between the real world and the fictions and conventions of accounting that Robert Olsten called to our attention. Traditional accounting is simply not reliable or relevant as a platform for management and strategy work.

Companies will find it increasingly urgent to deal with new challenges. Ultimately, it will be necessary to discuss and define what factors in reality are crucial indicators of company survival, growth, and earnings capability. Those factors are what stakeholders want to learn about. They are seldom or never reflected in a timely manner in accounting data.

In Chapters 3 and 4 we will discuss practical approaches to new, largely "accounting-free" reporting or accountability systems, models that can be applied individually and without delay, by any company that wants to get a better grip over its situation. These approaches have been implemented with great results and can open up an era of experimentation that gives companies freedom to take initiatives. We are convinced that out of such an experimental spirit will arise something better than what we have now.

What Damage Does the Present System Create?

A friend of the status quo might offer a last line of defense for it: Given the fact that all models by nature must offer a simplified view of reality, could we not accept accounting as such an incomplete but still useful model? After all, a map can never give the whole picture—if it did, it would be unwieldy and complicated. So, can't we keep accounting anyway, even as a basis for decision making, despite all its faults? Are present practices only irrelevant, or do they, in fact, create serious damage? That was exactly the question that U.S. Senator Joseph Liebermann asked in a discussion with New York University accounting professor Baruch Lev, one of the pioneers in academia for new thinking and practices in accounting.¹⁸

Is it a question of serious damage, or just damage, when companies themselves, analysts, and other stakeholders, including the investing public, are misled by unreliable or irrelevant accounting, for instance in mergers and acquisitions, bond issues, and other due diligence processes? Is it serious damage, or just damage, when banks grant or refuse loan applications based primarily on accounting data?

As we have seen above, and as many academics, business watchdogs, analysts, regulators, and practitioners have noted, accounting offers innumerable opportunities for creative, aggressive, or downright dishonest practices. Some frequent kinds of financial statement tricks may be technically legal, yet they create a picture of the company that has little to do with the underlying reality. They are only misleading. And borderlines between more or less trustworthy accounting are getting increasingly blurred. ¹⁹

Creative accounting is not necessarily a new problem,²⁰ but the situation today seems to be worse than it has been. The "recurring charge" scheme is reported to be used today by 30 percent of large, publicly traded companies in the United States, against only two or three percent before 1970.

The wave of accounting scandals has created a storm of protests and calls for new rules and regulations, tighter controls, and a higher level of business ethics. The overwhelming majority of the demands for change have been limited to changes within the system, a reformist view of the situation. The Sarbanes-Oxley legislation is a case in point.

Small steps of change, or stricter supervision of existing practices, may be a tempting and convenient fast track for regulatory bodies to be seen to be doing something immediate about the disappearing confidence in accounting, auditing, and business in general. However, if our ambitions are higher, if we want to obtain more significant results, major changes cannot be avoided. It becomes more and more obvious that, even in the best of circumstances, with the strictest possible rules, the toughest supervision, and the highest ethical standards, accounting and accounting-based models give too much leeway for arbitrary, incomplete, and misleading pictures of a company. The so-far unchallenged position of the accounting system as a tool for many different kinds of decisions in business and the economy is untenable in the long run. The problems have reached a level close to intellectual, ethical, and management disaster. One basic reason, as we will discuss in more detail in Chapter 2, is that accounting does not adequately relate to the fundamentals of a company in the twenty-first century. It is dangerous to use old maps in a fast shifting landscape, or, as the outstanding banker Walter B. Wriston expressed it: "Flying by faulty instruments is dangerous."21 The sooner we make the change to more adequate instruments, the better it is for all parties involved.

The focus needs to change from *accounting*, as an academic discipline, to *accountability*, with emphasis on finding honest and relevant tools for practical business and management applications, strategic decision-making, stakeholder reporting, valuation, risk management, auditing, and financing.

"The Emperor's New Clothes"

The Danish storyteller H.C. Andersen wrote a charming story about deception and public opinion, "The Emperor's New Clothes." As we all recall, it is about two rogues, who fool a whole city, including the emperor, as they present a (nonexisting) set of fabric, of which they make a beautiful (nonexisting) dress for the emperor. The scheme is close to success, when a young boy reveals the truth and exclaims, "But the emperor has no clothes!"

Blind belief, without questioning, reflections, and reason has a less charming, more detrimental face, fundamentalism. It can be defined as a set of dogmas that survive beyond their "best before" dates, without being affected by a changing environment or new evidence. We see its harsh consequences, when it blindly supports religious beliefs, be they Jewish, Christian, Islamic, or other.

"The Rear View Mirror"

Accounting data, by definition, belong in the past tense, while business decision making, also by definition, aims to the future. This conflict between the time per-

spectives of accounting and business decision making is impossible to overcome, if one wants to retain a minimum of honesty. Reflecting past performance is the one and only legitimate focus of accounting data. It is not necessarily a clear and reliable rear view mirror, but any other focus is definitely unreal.

Under the slogan "business as usual," accounting fundamentalists have tried to make business practitioners believe that it is possible to use past accounting data as the starting point for valid prognoses, perhaps in the form of trend extrapolations. They have also tried to make us believe in budgets and such questionable techniques as "discounted cash flow," "net present value," and "real options." The reality is that the future is, and always has been, genuinely unpredictable. On the admittedly arguable assumption that the world and the economy are even more exposed to sudden, dramatic change today than ever before, we will discuss this in some detail in the next chapter.

The belief in forecasts based on past accounting data or other forms of guesswork turns extremely dangerous when it is allowed to influence or guide the company risk management process.

The Risks of Accounting-Based Risk Management

A prime responsibility for any management is to ensure, as much as possible, the company's survival. This priority calls for a high level of attention to the risks a company may be exposed to. Much of what goes under the term risk management is, however, much too deeply rooted in accounting-based financial aspects, rather than business aspects.

In traditional—and traditionalist—risk management, the process basically aims at guessing, perhaps through devising scenarios, future events that may have a negative or detrimental impact on the company, estimating the probability of these events, and then designing programs to protect the company against those events, giving priority to those that have been assigned the highest probability numbers. A clue to risk management in this school of thought is to use past data, mostly accounting-based, to predict future events. The reality of life does not support this process, simply because accounting data have no legitimate role, except listing past transactions.

Serious risk management must accept this reality. The uncertainty factors tend to be too many and too strong. Instead of trying to predict threats or other events, it must focus on reducing the sensitivity of the company to unpredictable forces. The only safe way to do this is to assess the dependencies the company is exposed to, areas or forces where outside influences can have a decisive damaging impact on the company.

One reason for the confusion may be unclear definitions of risk, as different from uncertainty. If risk is defined as possible outcomes among a range of known possibilities, such as for instance tossing a coin, or casting dice, probability calculation may have some meaning.

But that is not the situation that a company finds itself in. A company is, at any given time, in a situation of complete uncertainty. Influences that impact the company can come from any source, at any time, from competitors changing their technologies or marketing approach, from financial circumstances, such as currency changes, interest changes, or other, from key employees suddenly and unexpectedly getting hit by accidents or illness, or deciding to leave for other reasons, from government regulations, from opinion or trend shifts in the general public, from changing investor preferences, and any number of other influences. Never has this situation of complete uncertainty been as clear as it is in our time.

In situations of genuine uncertainty, there is only one way to act, and that is to attain the highest possible flexibility, or resilience, or, as we prefer to call it, "freedom to act." A more in-depth discussion is presented in the next chapter, and practical ways to handle it are discussed in Chapter 5. Past (as they are by definition) accounting data have very limited roles to play in this process.

THE VALUE MESS

The Search for "Real Value"

One of the serious problems in accounting is how it is used to show and calculate value. If the long history of bubbles has a lesson to convey to us, it must be that we should seriously question this use. The first question to ask regarding value is: Does any asset²² have a "real" or "true" value? Let us take a good look at this issue, since it is basic to many applications of accounting.

The belief that there is a magic Grail in terms of objects having a "RealValue," which can be expressed in absolute and reliable numbers, is deeply rooted. That is why we can read such sentences as, "The company reserves the right not to sell any assets, if the bids do not reflect full value," or "The enterprise value is the starting point for bidding," or an analyst talking about raising or lowering "the target value" of a stock, or discussing what "the real value of the Euro" should be. Even frequently used terms as "true shareholder value," book titles such as What Are Stocks Really Worth?, or consultant formulas proclaiming "Economic Value Added" are as questionable as many companies' accounting proved to be in the early 2000s.

A Wilde View of Value—and Price

According to a quote from Oscar Wilde, "A cynic is a person who understands the price of everything, and the value of nothing." If that is true, many economists would classify as cynics. Well-respected "contrarian" David Dreman expressed the reality of this dilemma very well when he exposed the fluctuations of a stock price, previously in the trading range of \$75 to \$84: "Trouble was, the

range of prices had nothing to do with the stock's real worth. People who purchased it at \$60, or even \$50, lost a bundle. Recent price: \$5."²³

The Bubbles Are Still Active

Share prices, whether shares of individual companies or industry groups, or whole stock markets, move up and down, sometimes slowly, sometimes in leaps and bounds. Do share prices ever represent something that could be called "true value"? If so, how come the share prices of tech companies as a group were cut in half over a few months in the early part of 2000, and some of the individual shares even more? Which day, hour, or minute did the share price represent the true value of the companies?

Currencies go up and down, just as share prices. In post–WW I Germany, stamps for normal letters were sold at nominations of billions of marks. A less dramatic, but still illustrative example is that since its introduction, the euro, the European Union currency, has been exposed to wide swings in relation to other currencies, among them the U.S. dollar. Desperate business writers and currency experts have asked what the real value of the euro is.

The huge swings in real estate prices in Japan, the United States, and Europe in later decades have clouded the views of real estate as a safe haven, where a mysterious "value" could be found and safeguarded. Anyone who has bought or sold a house recognizes the confusion about what the property is "really" worth. Realtors may establish a price range, aiming at something they could call a real or at least a fair value, but variations around that target are often substantial. In the end, success in making a deal invariably hinges on the right buyer showing up.

One of the strong buzzwords in the business community in the 1990s was shareholder value. Creating or increasing shareholder value has been widely trumpeted as the ultimate strategic objective for boards and managements. It has been used as a reason for innumerable mergers and acquisitions—although the goal has rarely been achieved. The basic challenge of defining what shareholder value actually is has been part of the problem.

So what about the "real stuff," commodities? And what about the most real of them all, gold, the metal that for a long time was used as the standard of world currencies? What is the real value of gold? Gold has a wide range of applications, from jewelry to teeth to currency reserves. It has outstanding physical qualities, corrosion–resistance as one of them, that gives it an aura of permanence that few other things can match. For thousands of years, gold as a metal has probably been more precisely defined in terms of quality and measurement methods than any other commodity. If value rests in the thing itself, one would think that gold should have a very stable value. What is the true story?

In the 1490s, the time of the origins of our accounting system, gold was priced at around \$2,500/troy ounce in today's currency. It then went through dramatic

swings up and down through the centuries. In the 1930s to the 1960s, gold was price-controlled to remain steady, at around \$35. In the early 1980s gold was quoted and sold at \$800 to \$900. Twenty years later, after sometimes galloping, sometimes benign, inflation, one would think that gold, this example of lasting value, would have a price tag at least in the range of \$1,000 or more. Instead, today it is sold worldwide at less than half of that, the mid-\$400 range.

Shares, currencies, and even real estate seem to be fickle friends, if one is looking for real or objective value. Commodities, even gold, are no better.

Asset Valuation Has Always Been Difficult

Asset valuation has always been a difficult discipline in itself, under the best of circumstances. Thick volumes have been written about methods to calculate asset value, even dealing with the relatively simple physical assets of the agricultural and industrial economies. Very few of the writers of these volumes have dared to draw a bold conclusion from their difficulties, the conclusion that they may be on a wrong track in one of their basic assumptions: trying to assign an objective numerical value to a thing in itself. Since this is a core issue in business, accounting, and management, we will discuss it in some detail.

Case in Point - Assess the "Value" of a Machine

If you have a factory nearby, ask three colleagues, maybe three accountants, to assess the value of a machine, the same machine, on the floor, without comparing notes with each other. Chances are that the three independent assessments will result in at least four different price tags, and don't be surprised if there is a wide variation between them!

Then discuss with them how they arrived at the "value" or price label. Did they start with a purchase price? Did they estimate an "autopsy value"? Did any of them try to look at the value of the machine in terms of its contributions to the total manufacturing and marketing chain of the business it is used in?

The Value Enigma—or the Value Mess

Have you noticed the inevitable confusion when two parties in a discussion use the same word, but with different meanings? No matter how bright and well meaning they are, the result is usually a complete tangle. Imagine then, if the whole business world used one word, not for two but for several different meanings, without clear distinctions! And imagine, on top of that, that the word would be one of the core business concepts, the concept of value! No wonder we would have a mess—the Value Mess.

Most dictionaries²⁴ show eight or ten different definitions of the word value. Even if we limit ourselves to those frequently used in business contexts, several very different meanings of value are used interchangeably, without making it clear which meaning we refer to in each given case. Some definitions are different enough to put semantic confusion of the *value* word as one of the roots of the general confusion of accounting.

Let us look at four different but frequently mixed-up meanings of value:

- **1.** Value as any number, for instance "What value did you enter into the table?" Let us call this Value amount.
- **2.** Value defined as the price we once paid for an item, adjusted or not by depreciation, for instance "What is the balance sheet value of that machine?" We can call this, if we like, Value historic price or Value b.s..
- **3.** Value as a potential price or price range we may be able to obtain, if we were to sell an item, such as "What is the value of your house?" This could be called Value potential price.
- **4.** Value as the benefit, usefulness, contribution of an item, such as a machine, to the company production process, or the brand to the company marketing process. We could call this Value^{usefulness}.

The four meanings are very different, which is why confusion pops up practically every time the word *value* or *valuation* is used in a report or a statement. Imagine if we all were to be consistent, only one week of our lives, strictly defining the word *value* every time we used it! Imagine a financial analyst or a due diligence consultant who had to clarify his or her reports in these terms! Imagine a Wall Street journalist who had to do the same thing!

Valueamount

This can apply to any item. It must be expressed as a number, it is not necessarily linked to a currency, and, of course, has no relation to Value^{b.s.}, Value^{potentialprice}, or Value^{usefulness}.

Value^{b.s.}

Balance sheets were traditionally seen as indicators of company value. The asset side lists prices we once paid for some (but not all!) of the things the company owns, the liability side lists some (but not all!) of its obligations. In both cases they may or may not be adjusted by arbitrary or conventional amounts.

The price we paid for an item can be interesting, as a memory of an historic transaction, which is what value is, in this sense. This is fine; we all need memory support, and it may be good to have a record of the prices we once paid for an item. We can list the amounts in relatively precise terms, which accountants and

legislators like. Then again, Value^{b.s.}, the amounts on the balance sheets, have nothing to do with what we may or may not get for those items if we want to sell them, Value^{potentialprice}, nor with their contribution to the company's business results, Value^{usefulness}. In fact, the price we paid must be lower than the Value^{usefulness} of the item to our business at the time of purchase. If not, we should not have bought it in the first place. And once the transaction has been made and registered, it is a historic fact without any further impact on the business. On top of this comes the fact that, today, many of the most significant resources for company survival or success have never been purchased the traditional way and have consequently not even come close to the balance sheet.

Valuepotentialprice

This is an indication of what we might get if we were to sell an item, in the near or distant future. Value in this sense has always been a hard nut to crack for economists of the old schools, since we deal with uncertainty in many dimensions. One dimension is the fact that we do not know anything about the future, which makes it impossible to know what we may get for an item tomorrow, or next week, or next year. The listings in real estate advertising are examples of that category, along with analyst predictions of future stock prices.

A key dimension is the fact that the price ultimately comes out as a result of a negotiation between two or more interested, and often emotionally involved, parties. When we sell a house, or a car, or a share, or, in fact, anything, we know that the price we will finally get depends entirely on whether "the right buyer" shows up.

When Value^{potentialprice} is expressed as a number, in a currency, it gets a totally undeserved air of precision. In reality, it is never precise. It is always a guesstimate. Value^{potentialprice} rests in the mind of a buyer. Consequently, as commodity, real estate, and stock markets show, it can swing wildly from year to year, from day to day, or from hour to hour. It is not an intrinsic, objective measure, such as for instance length or weight. There is never a "correct" Value^{potentialprice} and it has no relation, or only an occasional relation, to either Value^{b.s.} or Value^{usefulness}.

Fortunately, this fundamental truth is gradually, although slowly, getting recognized. Traditional economists are getting their old ideas challenged by members of the so-called behavioral economic schools of thought, for instance such outstanding academics as the winners of the 2002 economics prize in memory of Alfred Nobel, Dr. Daniel Kahneman and Dr. Vernon Smith.

Value^{usefulness}

In many ways, Value^{usefulness} is the most genuine form of Value. It can well be argued that the only "real" value of an item is the benefit someone derives from it.

One of the most significant, but sometimes neglected, aspects of Value^{usefulness} is that it can be expressed only in terms of usefulness:

- To a defined person or a defined company
- In a given context, a given set of circumstances
- At a specific time

Change one of these parameters and the Value^{usefulness} changes! Value^{usefulness} can never be used as a general or an absolute term. A share may be useful in my portfolio, given my investment priorities, at this time (!), but not in someone else's. Company A would be more useful, would produce or contribute more, if merged with company X than with company Z. There is no once-and-for-all valid value or even a "fair value" of Company A.

Any single item is useful only in a closely defined context. One step on a ladder has no value without the other steps. All links in a chain are required for the chain to be useful. One single machine on the factory floor is useless if isolated from the rest of the production process—and from the product and marketing context of the company.

The conclusion is that Value^{usefulness} is not an objective quality; ultimately it is only a perception or a feeling. Consequently, shocking to some, *it cannot be expressed in numbers*, only in words.

Total confusion arises when variations of Value^{amount}, Value^{b.s.}, or Value^{potentialprice} are interpreted as having the meaning of Value^{usefulness}, such as the benefit or contribution of these items to the business operations. Then we are going far beyond reality, into the Value Mess. The four value concepts must be kept apart and clearly defined.

The paradox, which may seem hard to recognize by traditionalists, is that:

- Value^{amount} and Value^{b.s.} can be expressed in relatively precise numbers—not necessarily meaningful numbers, except as an historic record, but precise.
- Value^{potentialprice} is a meaningful number only if one believes that the future is predictable. This condition is more and more questionable, or in fact dead wrong, as for instance stock markets, real estate markets, commodity markets, and currency markets show increasingly clearly. Just look at the Value^{potentialprice} of a sample of stocks as predicted (or, rather, guessed) by Wall Street experts, the specialized analysts, in the year before and after 2001. Alternatively, this truth can lead to tolerating very broad price ranges, which again reduces the benefits of the guesswork. How helpful is it, if an analyst predicts a stock to be really "worth" anything between \$100 and a dime?
- Value^{usefulness} is a very meaningful concept. However, it is never precise, nor
 is it generally applicable. It must always be defined in a specific context, for
 a defined kind of application, at a certain time, in a defined set of condi-

tions, very much including the emotional situation of the players. These conditions are rarely constant. Consequently, valuation methods looking at usefulness can, by definition, never result in a precise number, in fact, not really in a number at all!

In this light, balance sheets are confusing instruments, to say the least. The *British Journal of Accountancy*, as early as September 1994, reviewed a report, "Making Corporate Reports Valuable," and called the balance sheet "an inconsistent hodgepodge of costs and values."

Case in Point-Value Judgments

When the Bank of England auctions off tons of gold, it is an indication that the usefulness of gold, in this case to defend the value of the British pound, has diminished.

Affection value may lead someone to pay a higher price for something that totally lacks value for another person.

There is a sign outside an antiques shop, "Junk Bought—Antiques Sold," obviously indicating that the seller and the buyer assign very different value to the same thing.

Or think of the French expression: "The best way to make a woman beautiful is a bottle of good wine—consumed by her spouse."

In the investment community, the fight between those who believe in value investing and those who advocate growth investing is hard and sometimes bitter. As the market swings in one or the other direction, one or the other side feels the same kind of comfort and support that a sailor may get from a tailwind, until the weather changes. In reality, and especially in our time, value and growth are two fuzzy subjects. Whatever definition one tries to apply, the two aspects are mutually dependent on one another. Value, in most businesses, is a function of growth, but it is also a condition for growth.

Consider the value of a glass of water to someone who is stranded in the Sahara or the Mojave deserts, compared to the value of the same glass of water to a person standing near his kitchen tap in a regular home in New York or London. It is useless to look into the glass to find clues to the difference in value. The value criteria do not rest in the glass or in the water; they rest in external conditions outside the glass.

Toward a New Understanding of Value

Let us sum up a few factors to get a better understanding of how to deal with *value* from a management perspective, especially as it relates to company value or shareholder value.

Value Is a Subjective Parameter

Contrary to classical concepts, the Value^{usefulness} of any item is not a measurable, objective parameter. Value does not rest in the thing itself. The value, whether of gold, real estate, currencies, tulip bulbs, bandwidth, shares, or companies, is set in

the minds of an interested party, a buyer, a seller, or in a dialogue or bidding process between two parties. Looking for an objective value is as futile as the search for the end of the rainbow. Swedish banker and industrialist Marcus Wallenberg, one of the international business leaders of the 1970s, expressed value as "a function of interest"—not bank interest but the interest someone has in an item.

The Market Cap of a Company Is Not Its Value

The market capitalization of a company, defined as share price times outstanding shares, does not adequately represent a value in any traditional sense. It is true that the price is a result of a bidding process between two parties, sellers and buyers. But since even in heavily traded stocks, only a fraction of all shares are traded in a given day, it must be assumed that the owners of most of the shares do not find it attractive to sell at the quoted price. Their implied perception of value is that the stock is worth more. This is also confirmed in takeover situations, when a buyer wants to get control of all shares or a big majority of them. As we all know, in such a situation the price is normally much higher than the previously quoted price. So, if market cap is not an intrinsic value of the company as such, then what is it? A suggestion is that it reflects, if anything, a range of perceptions held by a minority of shareholders wanting to sell and potential shareholders interested in buying, at a given moment. Those perceptions express a level of confidence that investors have in the company, its management and its business position—a combination of emotional indicators that are the primary basis for a share price.

Balance Sheet Numbers Relate to Price, Not to Value

The assets or the equity on a balance sheet are not related to Value (Value usefulness). The value of a company as an ongoing concern cannot be assessed by adding numbers from a balance sheet, numbers that have their dark origins in old, later adjusted or manipulated purchase prices. This is equally true, even if the confusions and misconceptions of the balance sheet were to be further increased by including mind-based assets or items of "intellectual capital." Even money itself has different value to different people and in different situations.

New Ways to Create Wealth

Finally, as a distinctive feature of the present economy, there is a new view of how wealth is created today. This wealth creation process is very different from that in the second or third economies, and it is even less linked to physical assets on the balance sheet. We will come back to this issue in the next chapter.

DISTORTED METRICS

How to Correctly Measure the Wrong Things

Many of the ratios launched with great fanfare during the new economy mania were rather absurd. The same is true, however, of traditional ratios, based on accounting data. They turn equally absurd, when examined a little more closely. Here are some examples of absurd measures used with more or less straight faces by people who ought to know better:

Absurd "New Economy" Measures

Many of the measures used in the IT boom had very poor intellectual or economic underpinnings. Intellectually they failed, trying desperately to prove company-internal value factors, when the value factors, as always, were based in the minds of the market participants. Economically they failed, when the ratios showed no relations or very weak relations to company fundamentals, survival, earnings, and growth.

Most of the measures were top-line related, such as web site visits, eyeballs, engaged shoppers, mind-share, or other exposure-related measures. As a common denominator, they were only remotely linked to earnings. Yahoo, for a time, had wonderful eyeball data. The number of visitors showed dramatic increases and numbers. For a time, Yahoo had a share price of more than 1,700 times past earnings.

Some measures of this era were bottom-line related. One of the most persistent was "pro forma²⁵ earnings," an unsuccessful effort to introduce seemingly formal accounting-related views, inherited from the merger raiders of the 1980s, to a concept that was basically not agreeable to the business views of the new economy, as it was then perceived.

Absurd Traditional Measures

Many of the traditional measures are equally unrealistic, and equally unrelated to real indicators of company performance, although they hide their irrelevance in a veil of terminology drawing on the traditions of accounting respectability.

Price/Book Value

There are two problems with this ratio, which was traditionally used as a basic valuation formula. The first is that the price the stock market happens to be willing to pay at a given time has nothing to do with an objective or true value of the company. The price of a share, just like the price of any other product or service, is created in the minds of potential buyers and sellers. It reflects the attraction the potential buyers feel for the company at a given time. That

attraction is based on several factors outside the company itself. Furthermore, the price is generated only by those who want to do business at a given moment.

Book value makes no sense at all, having no relationship whatsoever to the "value" of a company as a going concern. This has always been true. In the present economy, when the real value drivers of the company have never even come close to the balance sheet, it is more true than ever. "Substance" is by and large irrelevant, if not even an impediment to success.

Making price/book value a basis for decisions on whether to lend money, for selecting which companies to invest in, for consideration in a due diligence process, or for any other economic action, is just another dubious way to misuse accounting-based data.

Price/Equity

This ratio suffers from the vagaries of the price component and the lack of rationality of the equity component. On top of that, today, when physical assets are not the decisive factors for company success, this ratio makes about as much sense as it would be to define the value of a soccer team in relation to the size and weight of the ball the team plays with. And what happens when a company outsources part of its activities, that is, dumps some of its physical equity and replaces it with contracts with outside suppliers?

Return on Equity

The equity defined on a balance sheet is a meaningless number, the rest amount when some (not all!) of the company's (manipulated) liabilities have been deducted from some (not all!) of its (manipulated) assets. The "mega-charges" made in the early 2000s to accommodate accounting to the merger disasters of the late 1990s just underline how senseless these accounting manipulations are. Since the return is also a manipulated figure taken from a frequently unreliable income statement, this ratio, again, equals relating two meaningless numbers to each other.

Return on Capital Employed

In addition to the reliability problems it shares with other accounting-based indicators, this ratio is highly dangerous if used in a corporation as a directive or target for managers to work toward. It invariably tends to lead to a focus on trimming the Capital Employed factor by tempting managers to avoid long-term investments to obtain look-good short-term gains in the ratio.

Price/Earnings

This ratio may seem to make more sense, until, of course, one has considered the weaknesses around the price variable.

Case in Point-February 22, 2005

On this day, the Dow Jones Industrial Index fell by 174 points. The analyst community was mobilized in all media to come up with creative reasons why it was truly logical that it should go down. In the next three trading days it recovered the loss, by a generous margin. Lo and behold, the same analysts were out there to explain why it was quite obvious that it should go up! When was the price "right"? When did it reflect a "true value"?

The earnings component of P/E suffers from several weaknesses as well. Most important of them is the likelihood that the earnings reported on the income statement have very little to do with real earnings. Given the fact that the earnings of a company are, at best, a small net result of a subtraction of the total of various cost items from the overall sales figure, two big numbers, the earnings figure that comes out of the calculation is subject to severe risks of misrepresentation, willful or not, or just plain accounting errors in the process. *Fortune*, December 27, 2004, published an investment guide for 2005, "The 20 Best Bargains at a Glance." Among the companies listed, the spread of the P/E ratio was from a low of 10.3 to a high of 45.4! P/E ratios are and remain nothing but arbitrary numbers, especially since it seems that everyone has a different way to define the E.

What about consistency over time? While the average variations from year to year are much smaller, say from a low of 7 or 8 over the last few decades to a high of mid-40s, that variation in itself is too big to permit anyone to draw conclusions, especially as those averages hide great variations.

The conclusion remains that price/earnings is a ratio between two very dubious numbers. P/E ratios are as dangerous to use as guidelines for investment or other decisions, as, indeed, any other accounting-based ratios are.

Adding a time factor to the equation makes the fallacy of the P/E ratio even more obvious: If we use trailing earnings, which are at least recorded earnings, and draw conclusions of future performance from that, we fall into the unpredictability trap. And if we try to predict stock market prices and earnings and develop future P/E numbers, we do not merely fall in the trap: We jump right into it!

The Death of P/E—Or New Life?

Once upon a time, in old monarchies, the transfer of power from one king to another was dramatically expressed: "The king is dead! Long live the king!"

The P/E ratio is seen by many in the stock market as the king of all ratios. It is one of the most cherished formulas for assessing whether an individual share, an industry segment, or the stock market in general, is reasonably priced, even reasonably "valued." As we have seen above, neither one of the two numbers that

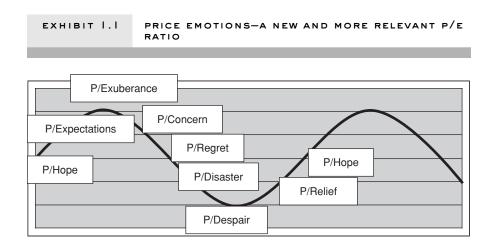
make up the ratio are very reliable. As the stock market shows us every day, prices jump up and down, apparently without any logic. And we certainly cannot ask for more proof than we have gotten in later years that earnings numbers are unreliable, whether they refer to past earnings or guesses about future earnings. The fact is that P/E variations between companies, even in the same business, are so wide that they defy any logic explanations. The search for logic in these numbers is vain. In math, two negatives are said to make one positive. That does not mean that putting together two unreliable numbers transforms them into a reliable ratio!

As long as we try to find an explanation for P/E numbers in—numbers(!)—we are at a complete loss. What we need to do is recognize the fact that the stock market is largely controlled, not by numbers but by emotions! This is true about the stock market in general, but also about the individual investor and his or her relations to a portfolio.²⁶

Time for a New P/E Ratio?

This leads us toward a dramatically different P/E, where the E does not stand for *earnings*, last year's, next year's or any other period's. Instead it stands for what really affects the stock market: *emotions*. Exhibit 1.1 is what a P/E chart of this kind could look like, over a period of time.

Does the chart in Exhibit 1.1 give us a magic way to make forecasts? Can it help us predict trend changes, help us see upturns or downturns before they happen? Unfortunately not! Not any more than the experts that Rich Karlgaard, publisher of *Forbes*, calls "The Priesthood: Pundits, Analysts and Economists." In the same article Mr. Karlgaard also states: "Judged by any professional standard, the collected sayings of the priesthood are so bad as to be approaching quackery." The chart does not help us any more than so-called "technical analysis" or any other methods to predict the future. It can possibly help explain, afterwards,



why things turned one way or the other. For a more in-depth discussion on predicting the future, please see Chapter 2.

When Is the Stock Market Reasonably Valued?

The traditional ratios discussed above have been used, and are still being used, by apparently serious financial analysts, not only for individual companies but also to try to assess whether the whole stock market is "reasonably valued."

In mid-September 2001, a week after the terrorist attacks on the World Trade Center and Pentagon, the Dow Jones Index, one of the trusted indices on the U.S. stock market, had fallen to around 8200. Financial analysts and media asked the question whether this was a reasonable level. Crystal balls were dug out from dusty cabinets to help answer the question. What appeared among the clouds in the crystal balls was tested against some of the ratios above, misguidedly called valuation models.

In its issue of October 8, 2001, *Business Week* correctly put the spotlight on the wide variation that four of these models produce. Conclusions ranged from an assessment that the market is undervalued by 15 percent to, at the other end, that it is overvalued by 40 percent! The "correct" stock market valuation, according to these models, should have been somewhere between a Dow of 5000 and a Dow of 9800!

Would any of us buy a thermometer that shows the temperature at a given point to be somewhere/anywhere between 30 and 60 degrees? Would we trust a scale at our fitness center showing our weight to be somewhere/anywhere between 50 and 100 kilos (or between 100 and 200 lbs)? (See Exhibit 1.2.)

Just as many of the absurd new economy measures were related to "top-line data," or "before the top-line data," so many of the equally absurd traditional ratios are related to "bottom-line data." Both, more often than not, are either guesswork or unreliable for other reasons.

Economic Laws or "Irrational" Human Factors?

It is increasingly accepted that economy and business are far from the numbers-based science it was once claimed to be. Behavioral economists and econo-psychologists have shown that assessment and valuation are controlled much more by irrational human factors than by economic laws. Value is in the eye of the beholder. This means a totally changed focus on what value factors to consider, define, and measure, and may provide a clue to why old economy fundamentalism is as far from reality as new economy enthusiasm. Financial factors are not what matters, essentially, and never have been. Nonfinancial forces control the development. Reality wins over accounting. Looking at and reporting on a company only from a financial perspective would be like looking at a car only

EXHIBIT 1.2

WOULD YOU ACCEPT A BATHROOM SCALE WITH THIS DEVIATION?



by checking the speedometer and the gasoline gauge, disregarding whether the engine is working, whether the tires are okay, and what it is supposed to be used for.

In a eulogy article in Forbes,²⁸ editor-in-chief Steve Forbes gives credit to Laury Minard, founding editor of Forbes Global. Steve Forbes's words reflect, not only on Laury Minard, but also on an important aspect of economics: "He never allowed the numbers-laden discipline to... obscure the fact that economics is about real, breathing people. He knew the discipline's strengths and shortcomings."

Get Real! An Emphasis on Business

While analyzing *financial statements* is largely irrelevant, analyzing *business performance* is highly relevant. In consequence, financial analysts should reassess their own profession. If they transform themselves into *business analysts* instead, they will have a chance to return to relevance and trust. Few experts have recognized this truth more clearly, and expressed it more succinctly, than Phil Dow, director of equity strategies at the Wall Street company Daine Rausher Wessel. He "predicts a renewed emphasis on a company's business—what its opportunities are, how those can be quantified, and how they compare with competition—to replace the previous obsession with price targets."²⁹

Such an emphasis on the business is exactly what we have selected as a foundation for the alternative reporting system we suggest in Chapter 4, to replace one-eyed accounting-based reporting.

Case in Point - Lucent and Financial Analysts

Lucent is one of the companies that have suffered and seen a nearly free fall in share price. The reason we give it as an example is not to rub salt into the wounds of Lucent management. It is to illustrate the futility of financial analyst work. Here is what some financial analysts said during the process. We have omitted the names of the respective and respectable financial analyst firms who made the ratings. However, we have based the presentation on an article in *Forbes*, September 10, 2001, where more information is available:

Time:	Actual Price:	Rating:
July 2000	\$49.50	BUY
Oct. 2000	\$31.38	LONG-TERM BUY
Dec. 2000	\$20.94	LONG-TERM ACCUMULATE
March 2001	\$10.27	MARKET PERFORMER
June 2001	\$ 8.32	BUY
July 2001	\$ 6.67	STRONG BUY

Lucent, of course, is very much a postindustrial economy company. It is understandable that financial analysts, stuck with their 500-year-old arsenal of financial tools, have a hard time understanding and explaining what goes on in this economy. Against this background, this quote seems very appropriate: "We must be able to do better than that!"

As we will see in Chapter 4, it is possible to build a reporting system based on largely accounting-free, but measurable data, a reporting system that reflects what goes on in the companies and their environment, that defines better than accounting numbers the conditions for company survival, earnings, and growth. It is a system that takes reporting from guesswork top lines and unreliable bottom lines to meaningful baselines. It includes awareness that many of the forces that drive company performance (a) do not exist in the company, but outside it, and (b) are not reflected in any traditional accounting statements.

The Value of a Company Is Based on Perceptions

Most companies have strategic goals that ultimately relate to survival, earnings, and growth. If so, anything that is seen, for instance by a potential buyer, as a contribution to survival, earnings, and growth could be viewed as an asset, whether it is soft or hard or anywhere in between, or a combination. Anything that is seen to hamper survival, earnings, or growth is a liability, whether it is soft or hard or anywhere in between. Value is ultimately a factor based in somebody's mind, a (potential) buyer and/or seller. Value is a perception.

The chart above, showing the wide range of ratios, clearly indicates that the process of valuating a company is not a mathematical issue. It is not based on

objective data. The same principle applies to the stock market as a whole. Valuation is entirely a matter of the eyes of the beholders, the perceptions of the stakeholders, not least their perceptions of the soundness of a business idea and its ability to reach its goals. Factors that support stakeholder perceptions of company goals are basic value drivers. This applies to any factors, no matter if they are hard, soft, liquid, or mixed. A truck, operated by a competent and motivated driver, can be seen as a value factor in a transportation company; it generates earnings and it is clearly related to the business idea. The same truck owned by another company may be perceived as a liability, restricting company flexibility, rather than as an asset.

What Is Shareholder Value?

An understanding of value is hard to reconcile with old beliefs in accounting. Neither does it match with accounting-based ratios used by financial analysts, then generously sprinkled over business and financial pages in our business media. It has serious implications for management priorities, given that creating shareholder value, in the full sense of it, is seen as an important priority.

Putting a Price Tag on a Company

If the value of a company is not in the thing itself, how does one arrive at a reasonable price?

The price of a share is ultimately a function of the willingness of present shareholders to stay as shareholders and the interest from new shareholders to join. It depends primarily on factors outside the company. Consequently, accounting data about the company are not the main source for decisions. Instead, decision making is initially the result of a four-stage process:

- 1. The total savings volume in society. This is a function of employment rates, cultural patterns, and a big mixed bag of sociological and psychological issues.
- **2.** The share of savings or investment funds that look to the stock market as an opportunity. This, in turn, is a function of a complicated pattern of sentiments, most of them as far from "rational" number-crunching as can be.
- **3.** The perceived relative opportunities of various business groups. These perceived relative opportunities swing fast, almost from hour to hour, and certainly from day to day. Just look at the changes in perceived opportunities of airlines, the hotel industry, health care, and the financial industry before or after September 11, 2001.
- **4.** The perceptions that shareholders and potential shareholders have of an individual company. Most of these perceptions are based on impressions that go far beyond traditional calculations, P/E numbers, and other arbitrary data.

Hopefully, instead, they are based on an understanding of the company's business, its opportunities and risks, the people who run it, and other aspects of real business, not accounting.

Summing up, how do you put a price tag on a company? The answer is: The price of a company is the result of the same factors as the price of any other products or services—that is, the outcome of a three-step competition process among potential buyers:

- 1. The competition for discretionary use of money: choosing between saving or spending
- 2. The substitute competition: choosing between various investment opportunities
- 3. The direct competition: choosing an individual company

In the first stage, investing is an activity in the most fickle of all fields, that of discretionary spending. Potential investors can always freely decide to *invest or abstain*, that is, do something entirely different with their money. The decisions are entirely based on the priorities of potential buyers. Relevant indicators include broad consumer and investor confidence data. The sum of all these decisions affects the total amount of investments.

An individual company can realistically not do anything to affect these decisions. The figures it may publish in its reports does not influence decisions on that level.

In the next stage, decisions about *how* to save or invest are examples of substitute competition. The result of *perceptions of* macroeconomic conditions, tax rates, interest levels, inflation expectations, business trends, political choices, and so on, affect the choice between bank deposits, money market accounts, bonds, stocks, or other savings or investment alternatives.

An individual company cannot do much to influence these decisions but it can make itself more or less visible.

The final stage is one of direct competition, the decision on which company or share to buy. This decision is affected by the company's visibility and attraction level:

- The ability of the company to present itself to the market
- The brand position the company commands
- The strategic position of the company
- The confidence the investing public has in top management
- The perceptions on the size or growth rate of the market the company serves
- The liquidity or exit possibilities that the share offers
- · A host of other factors

For shareholders to choose an individual company, several conditions have to be met:

- Prevailing conditions in key market segments must be attractive.
- Shareholders must understand and appreciate the business idea, what the company aims to achieve, and its ability to reach its goals.
- The company should be able to show its flexibility, "freedom to act," since
 this ability decides how much value added the company can expect to generate and how much of it the company can keep.
- Shareholders must have an idea of how the company is perceived in important stakeholder groups, since those perceptions define, among other things, such factors as market share and relative price level.
- The company must offer shareholder flexibility, that is, trading patterns that give shareholders exit possibilities.

These conditions can be measured and registered, but not through accounting data. Accounting-based ratios are also of very little help. The investing community needs and deserves more useful information systems.

NOTES

- 1. The two-liners appearing here and there under the chapter headlines are quoted from Hans V.A. Johnsson, *Analysts to Zhu Rong Ji: A New Economy ABC*, Sarasota, FL. 2000.
- 2. www.ACAUS.org_his.html.
- 3. For a broad and insightful discussion on the severe limitations of the reliability and relevance of accounting, see Robert E. Litan and Peter J. Wallison, "Beyond GAAP," in the Special Edition of *Regulation: The Cato Review of Business and Government*, Cato Institute, Washington DC, 2003. The two co-authors of the article enjoy a high level of credibility. Robert E. Litan is vice president for research and policy at the Kaufman Foundation and a senior fellow in the Economic Studies Program at the Brookings Institution. Peter J. Wallison is a resident scholar at the American Enterprise Institute and co-director of its Financial Institutions Project.
- 4. Arthur Levitt, former Chairman of the U.S. Securities and Exchange Commission, in *Directorship*, Greenwich, CT, July/August 1999.
- 5. Joanne Gordon, "Accounting: It's Not Just a Job, It's a Misdemeanor." *Forbes*, March 18, 2002.
- 6. For a detailed account of this case, look for instance in John A. Byrne, *Chainsaw: The Notorious Career of Al Dunlap in the Era of Profit-at-Any-Price*, Harper Business Books, New York, 1999. A short but still extensive summary of the book was published in *Business Week*, October 19, 1999.

- 7. For an in-depth presentation of this case, turn to Forbes, November 27, 2000.
- 8. According to a 2002 study directed by accounting professor Russell J. Lundholm of the University of Michigan, more than 150,000 earnings reports issued from 1988 to 1999 excluded certain expenditures from their pro forma earnings. The results of the study suggest that, with some well defined exceptions, "we should be skeptical of all expenses that companies exclude from their pro forma earnings." Mark Hulbert, "When Those One-Time Expenses Have a Refrain," *New York Times*, September 15, 2002.
- 9. See for instance David Henry, "Why Earnings Are Too Rosy," *Business Week*, August 13, 2001.
- 10. See for instance a study made by the accounting department of Florida Gulf Coast University, directed by accounting professor Deanna Oxender Burgess. The study was reported in *New York Times*, September 15, 2002.
- 11. In "When a Rosy Picture Should Raise a Red Flag," New York Times, July 18, 1999.
- 12. As in "Accounting Gets Radical," Fortune, April 16, 2001.
- 13. The U.S. Sarbanes-Oxley legislation is a case in point. Rather than trying to devise serious changes in existing reporting systems, the legislators just proposed—and enacted—"more of the same," stricter rules and tougher enforcement of existing regulation.
- 14. In his *The Structure of Scientific Revolutions*, University of Chicago Press, Chicago, 1996, 3rd edition.
- 15. James Gleick, *Chaos: The Amazing Science of the Unpredictable*, Vintage, London, and other publishers, 1998.
- 16. The concept of "the fourth economy" will be explained in some detail in Chapter 2.
- 17. The concept of a flat earth has, of course, got an unexpected revival and an entirely new meaning through the 2005 book by Thomas L. Friedman: *The World is Flat: A Brief History of the Twenty-First Century*. Farrar, Straus & Giroux. This book, incidentally, confirms many of the views on the present world and business situation that we present in Chapter 2, under the umbrella of "the fourth economy."
- 18. Reported by Professor Lev, in a conversation with HJ in December 1999.
- 19. See Howard M. Schilit, Financial Shenanigans: How to Detect Accounting Gimmicks and Fraud in Financial Reports, McGraw-Hill, New York and other places, 1993.
- 20. See "Are Those Revenues for Real?," Forbes, May 29, 2000.
- 21. Walter B. Wriston, The Twilight of Sovereignty. How the Information Revolution Is Transforming Our World, Charles Scribner's Sons, New York, et al., 1992.
- 22. See Justin Fox, "When Bubbles Burst," Fortune, June 11, 2001.
- 23. Forbes, Money & Investing, August 21, 2000.
- 24. As an example, *The American Heritage Dictionary (Second College Edition)* cites 10 different meanings of *value*, of which four or five are linked to business and accounting.

- 25. Pro forma earnings, as a concept, basically means that certain items, for instance such items that were deemed to be of a nonrecurring character, could be excluded from the income statement. The idea was that the earnings report would thus show more closely the earnings from the "normal" operations. The problem was that many companies excluded cost items that were, in fact, parts of normal operations, creating a more distorted or confused picture of the company's real earnings capacity, rather than the contrary.
- 26. For a thorough discussion of the role of psychology and emotions in investment decisions, see John Nofsinge, "Investor Madness: How Psychology Affects Your Investing and What to Do about It," *Financial Times*, Prentice Hall, NJ, 2002.
- 27. Richard Karlgaard, "Pity Pot Priesthood," *Forbes*, October 14, 2002. The article is well worth reading and is loaded with concise, excellent, and telling examples.
- 28. Steve Forbes, "Good Man, Too Early Gone," Forbes, Sept. 3, 2001.
- 29. Bethany McLean, "Investing: Finding Our Way," Fortune, Oct. 15, 2001.