CHAPTER ONE

1

Significance of Value

It's always hard to value things. In some cases, you don't have enough information. In other cases, you don't want to know the truth.

—Donald Bronstein (1972–), American investor

SINCE THE BEGINNING OF TIME, some form of valuation has been involved in estimating the worth or price of each item in every exchange between trading parties. Whether through barter, cash, or some other medium, assets have been exchanged constantly in personal, business, and taxation transactions on some agreed-on basis. Before money and banks, payments often consisted of sheep, goats, or bushels of grain; in each case, an implicit value was involved. As a result, based on the earliest known records, from around 5000 B.C. at Jericho in Israel, some consider valuation to be the world's fifth oldest profession, after hunters, farmers, merchants, and priests.

BUSINESS USES FOR VALUATION

When considering a substantial business deal, whether a major expansion, significant acquisition, plant closure, or considerable divestiture, management will eventually reach a tipping point. A go/no-go decision has to be made, based on a bottom line calculated from inadequate information. The key questions are: How much value will be created, and for whom? The answers can be elusive; the process is rather like trying to distinguish a black sock from a blue one when dressing in the dark. Often, many of the assets involved can't be seen and aren't recorded anywhere, but are still real.

Many readers, be they lawyers, accountants, teachers, bankers, judges, investors, analysts, or managers, will have had some involvement with the valuation process. They will know how challenging it is to determine the value of a business asset. But some may not realize the difficulties and may still look at traditional accounting statements to show how much a company or even an asset is worth. Please don't! Those figures are generally based on historical costs, after some amortization, and reflect the past, not the present.

In reality, value is about the future; it is also about many more assets than the traditional items—receivables; inventory; property, plant & equipment—beloved of bankers, that we all can touch and feel. Much of the value of any company, as seen by purchasers and investors, lies in its unrecorded, usually internally generated, intangible assets—brands, licenses, contracts, workforce expertise, and so forth. Some authorities place the figure for the United States at over 70%, as shown by the Standard & Poor's (S&P) 500 index. The existence of intangible assets makes the art of the deal somewhat like trying to put a key in the front door lock when the porch light is off.

When a business buys a building for $2 million, it shows the same amount as an asset on its balance sheet and has it available as collateral for borrowing. If it hires an employee who is brilliant and can generate an additional $3 million in sales, with a guaranteed bonus of $300,000, the firm not only cannot record an asset, but must show the guaranteed payment as a liability. Yet the purchase of the building is likely to add less to the fair value of the firm than the additional profits and cash flows generated by the hiring.

MERGERS AND ACQUISITIONS

The most obvious need for valuators in business comes when a merger or an acquisition is undertaken. If the buyer is strategic, its managers often

wonder how much of that very intangible asset popularly known as synergy will be generated by the transaction. What effect should it have on the price they are willing to pay? There is obvious value, perhaps a significant amount, in immediately being able to use otherwise idle productive capacity or to have direct access to new products or markets. However, there are also always risks and costs involved, sometimes considerable ones. Both the advantages and the risks are things management must question and a valuator has to quantify. For the increasing number of financial buyers, valuation is even more important. What can be paid often depends on which noncore assets can be sold and for how much.

FINANCIAL REPORTING

Since the 2008–2009 worldwide financial crisis, when many financial markets ceased to function effectively, and the resulting recession, more and more attention is being paid to corporate financial reporting. International Financial Reporting Standards (IFRS) have been or are being adopted by over 100 countries, representing more than half of the market capitalization of every stock market in the world. The main holdout is the United States, which has always believed in the sanctity of its own highly developed Generally Accepted Accounting Principles (GAAP). However, their custodian, the Financial Accounting Standards Board (FASB), is continuing to work with the International Accounting Standards Board (IASB), creators of IFRS, to harmonize the two regimes. Happily, the integration of the two accounting languages is not likely to lead to a mishmash franglais, as exemplified by "*Donnez-moi les* cornflakes"—"Pass me the cornflakes." The major impact will likely be a level playing field around the financial world, with more assets being reported at fair values as against historical costs.

During the first decade of the 2000s there were significant changes in financial reporting in the United States. One major improvement was a change in accounting for acquisitions and the attendant introduction of goodwill impairment testing. Under both GAAP and IFRS it is now mandatory for all acquirers to allocate the purchase price of a target among the various assets acquired—financial, physical, and intangible—as well as the liabilities assumed, in keeping with their fair values. In general, all long-lived assets, except goodwill, which is an unamortized residual that is only tested for impairment, have to be amortized, thus impacting earnings.

Intangible Assets

To be recognized as an asset, an intangible must satisfy one of two criteria: it must be either contractual in nature or salable. As the purchase price allocation (PPA) process is critical to most transactions (see Chapter 13), valuators have gradually taken on a more strategic role in the acquisition process. They help identify potential intangible assets that may be owned by the target, and develop preliminary views as to their values during the planning, regulatory approval, and due diligence phases. Although any residual is booked as goodwill and not amortized, it, together with all long-lived physical and intangible assets, has to be annually tested for impairment. This is done to determine whether any reductions of carrying amounts are required as a result of changed circumstances. While only purchased intangible assets are recorded, the key Step 2 of the GAAP goodwill impairment test that determines the amount of any write-off does not differentiate between them and similar internally generated items.

Fair Value Measurement

In plain language, fair value is a broad concept; a thesaurus gives 47 synonyms for *fair*, including candid, equitable, honest, impartial, just, lawful, plain, reasonable, sincere, and upright. Without the modifier *market*, fair value can be seen as a "value" that is "fair." Accordingly, there is wide latitude as to what it might be. Depending on circumstances, the fair value of an asset could be its market, intrinsic, or investment value and might represent either a liquidation or a going-concern amount. Fortunately, FASB and IASB have developed a fixed definition, which is discussed in Chapter 2, and a related framework to estimate it, described in Chapter 3.

Fair Market Value

The term *fair market value*, which can be traced back to *United States v. Fourteen Packages of Pins*, an 1832 federal court tariff case, has become well defined and fully established in legal, tax, and accounting settings. It now relates to finding the value that an asset would have on a market that is fair, in the context of a real or hypothetical sale.

From the mid-nineteenth century onward, with the development of national and then international markets, the need for business valuation in most Western countries has been driven principally by insurance and tax/tariff requirements. In recent years the focus has moved to fair value for financial

reporting. In the United States the term was used, interchangeably with fair market value, during the 1920s to record assets on balance sheets. In 1933, the newly minted Securities and Exchange Commission (SEC), due to the excessive share price declines since 1929, prohibited any write-ups of assets over their original cost.

At the same time, the SEC switched the emphasis among the financial statements from the balance sheet (statement of financial position) to that for profit and loss (income statement or statement of operations); we are now seeing a form of "back to the future" as the emphasis is gradually returning to assets and liabilities from revenues and expenses—but that is another story.

Relevant Documents

Fast-forward 20 years to 1953; the Depression is long over, prosperity is back, and fair value returns. In that year, Accounting Research Bulletin (ARB) 43 stated that from then on, fair value was to be the basis for recording all assets acquired in a purchase; however, the term was not defined, nor were any procedures prescribed to estimate it.

The 1970s, in the aftermath of some so-called "dirty pooling" scandals, saw the issuance of Accounting Principles Board (APB) Opinions 16 and 17. Under them, fair value was again required to be used in recording assets acquired other than in a pooling of interests. They also established the notion of identifying and recording purchased intangible assets, apart from goodwill; for fair value, this was the beginning of the modern era. As none of those terms were defined, the tradition arose of using the same fair market values for recognizing assets in the financial statements as were shown on the tax returns; any unallocated balance went to goodwill, which was amortized over a period of up to 40 years.

Then came the booming 1990s, when economic changes forced a new look at accounting policies. In that decade, there were numerous, sometimes enormous, acquisitions fueled by new technologies and the apparent strength of firms' intangible assets and intellectual property. The latter is an important subset of intangible assets (patents, trademarks, copyrights, designs, trade secrets, etc.) that are granted specific legal protection.

The average price-to-book ratio of the S&P 500 index is considered a useful proxy for the unrecorded intangible assets owned by American industry. This rose from about 1.1 times in 1982, the start of the last major bull market in shares, to close to 5.0 times at the peak in 1999; it has since dropped to around 3.0 times in 2010.

In that so-called Goldilocks era (1990–2005), when growth of the U.S. economy was not too big, but not too small, a significant number of FASB documents dealt with value, measurement methods, and present value techniques. Of the 32 Statements of Financial Accounting Standards (SFAS) issued in the decade, 15 addressed recognition or measurement issues, and 11, with some overlap, referred to present value techniques.

The first few years of the new millennium were hectic. In 2000, FASB issued Concept Statement 7 dealing with net present value as a means of estimating fair value. In June 2001, it issued SFAS 141 and SFAS 142, quickly followed by SFAS 144, *Accounting for the Impairment or Disposal of Long-Lived Assets*. Those documents included an earlier definition of fair value and provided detailed procedures for recording intangible assets in business combinations. The American Institute of Certified Public Accountants (AICPA) followed with an In-Process Research and Development (IPR&D) Practice Aid (December 2001) that contained some detailed descriptions of acceptable valuation premises and practices. In January 2003, AICPA issued Statement on Auditing Standards (SAS) 101, which established the auditor's role in assessing fair value measurement; finally, in June 2006, SFAS 157, *Fair Value Measurements*, was issued; a final revised version as Accounting Standards Codification (ASC) 820 followed on May 12, 2011.

The term *fair value* has always related to financial reporting, whereas *fair market value* in the United States and Canada, plus *market value* in much of the rest of the world, is now usually linked to tax reporting and financing requirements. But fair value has always been stated to be market-based, and many practitioners have considered it to be synonymous with fair market value. This is changing. FASB has observed that the U.S. definition of fair market value, which is, in effect, set out in U.S. Revenue Ruling 54-60, relates principally to assets (property) and has attached to it a significant legal content. Because such interpretive case law may not be relevant for financial reporting, FASB chose to develop its own definition (described in Chapter 2) that is free of past interpretations and case law and represents an "exit" price based on the new concept of market participants rather than willing buyers and willing sellers.

Under both IFRS and GAAP, there is a major distinction between the two terms: Fair value does not consider the point of view of a willing seller, but is solely an exit price. In Chapter 4 a simplified example shows that fair value using market participant assumptions can be significantly lower (or possibly higher) than fair market value based on management's expectations.

Fair Value Accounting

The worldwide debate about the role of fair value (as defined in ASC 820) in financial reporting was still under way in 2011. The current model is mixed—some assets, both financial and physical, are carried at amortized cost, most of the rest at fair values. However, disclosures in both the financial statements and their notes provide additional fair value information for both groups. Most practitioners agree that the present situation creates anomalies and challenges. There is no potential consensus, as there are a number of arguments for and against the complete adoption of fair value accounting. They are grouped into objective and subjective categories in Tables 1.1 and 1.2.

TABLE 1.1 Objective Arguments Supporting and Opposing Fair Value Accounting

Supporting	Opposing
Easy to explain	Sometimes difficult and costly to determine and audit
Always relevant	More susceptible to bias when estimated
Prevents some transaction structuring	May create inconsistency due to different models and inputs
Promotes consistency	Not always useful, such as factories versus financial instruments
Provides basis for investment decision	Could be confusing when combined with transaction flows in income statement
Improves transparency	Lacks relevance when assets are to be held

TABLE 1.2 Subjective Arguments For and Against Fair Value

Supporting	Opposing
It ensures correct timing of impairment losses.	In some cases, there is no real market, only a notional one.
It is a useful early indicator of problems.	Markets can be wrong; management's estimates of future cash flows may be better.
Management intent may produce harmful bias.	Market pessimism or optimism is irrelevant if there is no intent or need to sell.
Losses cannot be masked.	Too much information exacerbates market spikes, as undue pessimism and irrational fear may create downward spirals; the inverse is also true.

INVESTMENT BANKERS VERSUS VALUATORS

Of the professionals involved in preparing valuations, investment bankers and valuators are the most important. As an aside, I have been both; the former in my twenties when I could easily pull an all-nighter for a bulge bracket (top-level) Wall Street firm, then the latter for most of the past 40 years. Both are heavily involved in determining values but for very different purposes. Ideally, they should work together for the benefit of their mutual client.

Typically, the investment banker brings two parties, the potential buyer and the reluctant seller, together and assists them in finding a sufficiently mutually beneficial price that makes a deal possible. This is important to that professional, as much of the investment bank's revenue is performance based. In the process, there is always some valuation activity, often a considerable amount. If the deal involves a public offering or a private placement of securities, there may be regulatory requirements for an independent valuation. As well, there is frequently the need or desire, by one party or the other, to obtain independent information on the soundness and future financial and economic viability of the transaction and the entities resulting from its completion, as well as its fairness to both parties.

Following closing, the valuator comes into his or her own, as independence is essential for the PPA process that has to be undertaken at fair values. In addition, normally there are compliance issues and requirements for financial, tax, and often statutory filings. Whether the work is done by a valuator, by an investment banker, or internally, the need to know the value of a business has global application, especially today with joint ventures, domestic consolidations, public listings, and increased foreign investment.

VALUATION REQUIREMENTS

Valuation involves some qualitative but mainly quantitative activities. Neither totally an art nor completely alchemy, it is a hybrid, driven by judgments that consider universal, basic economic principles, such as supply, scarcity, demand, substitution, and utility. There are three generally adopted approaches: market, cost (asset-based), and income. These are discussed in more detail in Chapters 6, 7, and 8, respectively.

In the larger picture, a business is usually thought of as a combination of resources (financial, physical, intangible, and human) that absorb inputs and generate outputs, rather than just a summation of the underlying assets. The

TABLE 1.3 Needs of Financial Statement Users

User	Need
Auditors	Asset values
Bankruptcy judges	Both business and asset values
Board of directors	Equity values
Financial analysts	Both business and asset values
Investment bankers	Aggregate business value
Legal counsel	Both business and asset values
Management	Usually both, as compensation may be tied to returns
Regulators	Both business and asset values
Shareholders	Equity values
Tax authorities	Asset values

invested capital (the sum of debt and equity) represents the total enterprise value (TEV) of the business; this must obviously equal the total of the fair values of each of the assets, liabilities, and equity.

A business valuation usually assesses the underlying earnings and cash flows generated by the resources involved and does not place a particular amount on each individual item. Asset appraisers, sometimes the same individuals but wearing another hat, look mainly at specific items and do not spend much time on the entire entity's economic position. There are strong demands for both, as shown in Table 1.3, which sets out the needs of 10 typical types of users.

LITIGATION RISKS

Finally, we must deal with a significant but not often discussed problem: securities (shareholder) litigation, which cost U.S. enterprises more than $35 billion in settlements from 1996 to 2005. Often, when investors lose money, they feel the loss was not due to their bad decisions, but was somebody else's fault, so their first thought is "Who can I sue?" The introduction of fair value reporting is likely to result in increased litigation, especially in the United States, but also in other countries. This is because estimating fair value is based on principles, not rules, and therefore requires significant judgment. In hindsight, it is sometimes easy for litigants to question any of the judgments exercised by valuators, financial statements preparers, or those auditing them.

Certainly not a lot of judgment is required for a valuation using Level 1 inputs of the three-level fair value hierarchy (discussed in Chapter 3); the

market price for an identical asset is what it is. There are more judgments in valuations using Level 2 inputs of adjusted data, or information from analogous markets. For example, a plaintiff's lawyer might ask a valuator, "How did you make the decision that market A was similar enough to market B that its prices are satisfactory Level 2 inputs for items traded in market B?" For Level 3 inputs (everything else), there are considerably more judgments involved, especially in preparing financial projections (discussed in Chapter 5), as well as using them in Discounted Cash Flow (DCF) valuation models (Chapter 8).

Undoubtedly plaintiffs will aggressively try to second-guess most judgments. A basic allegation is likely to be that an impairment write-down should have been made earlier than it was. In a Level 3 case, they will say that the models were based on improper assumptions, the projections were poorly constructed, and so on. This focus, of attacking well-supported judgments based on subsequent happenings, will be heightened in the United States if there is a move toward IFRS with its principles-based accounting, which requires more judgments, and away from GAAP's rules-based accounting, which involves far fewer.

Such attacks will begin in the early stages of the litigation, due to the 2007 *Tellabs* decision by the U.S. Supreme Court. That body held that, before a securities matter can even get to the discovery stage, a court must weigh the allegations in the complaint and decide if they suggest fraud or its absence. Where the suggestion of fraud is at least as strong as its absence, the case goes forward; otherwise it does not.

What this means, in fair value–related securities lawsuits, is that a court at the outset will be called upon to consider whether the accounting and valuation judgments that were made, in connection with whatever procedure is being challenged, are tainted by fraud or they appear to have been made in good faith. This focus isn't necessarily a bad thing for defendants. Describing how well-supported judgments, exercised in good faith, were undertaken can be a very effective defense with judges, but not necessarily with juries, whose eyes may glaze over from hearing the details. While it may be an excellent defense, the questioning of many accounting and valuation judgments in cross-examination is undoubtedly going to increase legal and other costs and give rise to anxieties among valuators.

TEN COMMANDMENTS OF VALUATION

To end this chapter, I have appended my 10 commandments of valuation. The Bible expresses the original commandments as "Thou shalt not . . ."; I prefer to express mine as "Thou shalt . . ."

1. *Look to the long term.* The stock market is oriented to short-term returns, but it is far easier to anticipate longer-term trends than to guess what will happen next week. Nobody can tell what the price of oil is going to be in three months, although speculators constantly bet on it, but nearly everyone can be certain that in five years it will be significantly higher than it is now. For example, when adjusting for lack of marketability, consider how long of a holding period may be involved.
2. *Hunt for information.* Start with the readily available information that every buyer or seller knows as well as you do. Then undertake wide-ranging due diligence, evaluating customers as well as competitors, their managements, and their markets. Many managers are unaware of all their existing and potential competitors. There are roughly 20,000 entities with traded securities in North America, and over 40,000 worldwide. Screen just about every one of them to find those similar to the subject; also look at databases such as Dun & Bradstreet or Hoover's for information on private competitors.
3. *Be skeptical of sources.* Always check the facts and strive to understand the biases and potential conflicts of interest in every source; make sure that the raw data gives suitable information for the intended purposes.
4. *Strive for effective rationality.* It is vital to sort the available information and grade it for quality, so as to filter out the inevitable noise.
5. *Be understanding.* In developing a capitalization rate, don't just rely on taking data from a respected source such as Ibbotson or Duff & Phelps. Seek out the real risks and potential returns of the business and quantify them to generate a rate for the entity commensurate with reported acquisition multiples.
6. *Stay humble.* Hubris leads to failure, while humility breeds an open mind that continually seeks good information and is willing to heed advice.
7. *Know your limits.* Unless you are prepared to do a lot of industry homework and you have a knowledgeable mentor, don't take on a job in a field you don't understand.
8. *Stay in your circle of competence.* This is complementary to "know your limits." Remaining in familiar countries or industries you know is the best way to be consistently sure-footed.
9. *Be a contrarian.* Existing trends won't continue forever—they never have. Bull or bear, markets can take a long time to develop. If you sense a distant upward or downward trend in an industry or sector, build it into your projections in two or so years, even if your peers look askance.
10. *Be adaptable.* Look at all possible valuation techniques; what works well at one time may be useless at another.