Chapter 1 A Framework for Business Analysis Using Financial Statements

Question 1.

Matti, who has just completed his first finance course, is unsure whether he should take a course in business analysis and valuation using financial statements since he believes that financial analysis adds little value given the efficiency of capital markets. Explain to Matti when financial analysis can add value, even if capital markets are efficient.

The efficient market hypothesis states that security prices reflect all available information, as if such information could be costlessly digested and translated immediately into demands for buys or sells. The efficient market hypothesis implies that there is no further need for analysis involving a search for mispriced securities.

However, if all investors adopted this attitude, no equity analysis would be conducted, mispricing would go uncorrected, and markets would no longer be efficient. This is why there must be just enough mispricing to provide incentives for the investment of resources in security analysis. Even in an extremely efficient market, where information is fully impounded in prices within minutes of its revelation (i.e., where mispricing exists only for minutes), Matti can get rewards with strong financial analysis skills:

1. Matti can interpret the newly-announced financial data *faster* than others and trade on it within minutes; and
2. Financial analysis helps Matti to understand the firm better, placing him in a better position to interpret other news *more accurately* as it arrives.

Markets may be not efficient under certain circumstances. Mispricing of securities may exist even days or months after the public revelation of a financial statement when the following three conditions are satisfied:

1. Relative to investors, managers have superior information on their firms’ business strategies and operation;
2. Managers’ incentives are not perfectly aligned with all shareholders’ interests; and
3. Accounting rules and auditing are imperfect.

When these conditions are met in reality, Matti could get profit by using trading strategies designed to exploit any systematic ways in which the publicly available data are ignored or discounted in the price-setting process.

Capital in market efficiency is not relevant in some areas. Matti can get benefits by using financial analysis skills in those areas. For example, he can assess how much value can be created through acquisition of target company, estimate the stock price of a company considering initial public offering, and predict the likelihood of a firm’s future financial distress.

Question 2.

Accounting statements rarely report financial performance without error. List three types of errors that can arise in financial reporting.

Three types of potential errors in financial reporting include:

1. Error introduced by rigidity in accounting rules;
2. Random forecast errors; and
3. Systematic reporting choices made by corporate managers to achieve specific objectives.

**Accounting Rules.** Uniform accounting standards may introduce errors because they restrict management discretion of accounting choice, limiting the opportunity for managers’ superior knowledge to be represented through accounting choice. For example, IAS 38 requires firms to expense all research expenditures when they are occurred. Note that some research expenditures have future economic value (thus, to be capitalized) while others do not (thus, to be expensed). IAS 38 does not allow managers, who know the firm better than outsiders, to distinguish between the two types of expenditures. Uniform accounting rules may restrict managers’ discretion, forgo the opportunity to portray the economic reality of firm better and, thus, result in errors.

**Forecast Errors.** Random forecast errors may arise because managers cannot predict future consequences of current transactions perfectly. For example, when a firm sells products on credit, managers make an estimate of the proportion of receivables that will not be collected (allowance for doubtful accounts). Because managers do not have perfect foresight, actual defaults are likely to be different from estimated customer defaults, leading to a forecast error.

**Managers’ Accounting Choices.** Managers may introduce errors into financial reporting through their own accounting decisions. Managers have many incentives to exercise their accounting discretion to achieve certain objectives, leading to systematic influences on their firms’ reporting. For example, many top managers receive bonus compensation if they exceed certain prespecified profit targets. This provides motivation for managers to choose accounting policies and estimates to maximize their expected compensation.

**Question 3.**

A finance student states: “I don’t understand why anyone pays any attention to accounting earnings numbers, given that a ‘clean’ number like cash from operations is readily available.” Do you agree? Why or why not?

There are several reasons for why we should pay attention to accounting earnings numbers. First, net profit predicts a company’s future cash flow better than current cash flow does. Net profit aids in predicting future cash flows by reporting transactions with cash consequences at the time when the transactions occur, rather than when the cash is received or paid. Net profit is computed on the basis of expected, not necessarily actual, cash receipts and payments.

Second, net profit is potentially informative when there is information asymmetry between corporate managers and outside investors. Note that corporate managers with superior information choose accounting methods and accrual estimates which determine the net profit number. Because accrual accounting requires managers to record past events and to make forecasts of future effects of theses events, net profit can be used to convey managers’ superior information. For example, a company’s decision to capitalize some portion of current expenditure, which increases today’s net profit, conveys potentially informative signals to outside investors about the company’s ability to generate future cash flows to cover the capitalized costs.

**Question 4.**

Fred argues: “The standards that I like most are the ones that eliminate all management discretion in reporting—that way I get uniform numbers across all companies and don’t have to worry about doing accounting analysis.” Do you agree? Why or why not?

We don’t agree with Fred because the delegation of financial reporting decisions to corporate managers may provide an opportunity for managers to convey their superior information to investors. Corporate managers are typically better than outside investors at interpreting their firms’ current condition and forecasting future performance. Since managers have better knowledge of the company, they have the potential to choose appropriate accounting methods and accruals which portray business transactions more accurately. Note that accrual accounting not only requires managers to record past events, but also to make forecasts of future effects of these events. If all discretion in accounting is eliminated, managers will be unable to reflect their superior information in their accounting choices.

When managers’ incentives and investors’ incentives are different and contracting mechanisms are incomplete, giving no accounting flexibility to managers may result in a costlier solution to investors. Further, if uniform accounting standards are required across all companies, corporate managers may expend economic resources to restructure business transactions to achieve a desired accounting result. Manipulation of real economic transactions is potentially more costly than manipulation of earnings.

**Question 5.**

Bill Simon says, “We should get rid of the IASB, IFRS, and E.U. Accounting and Audit Directives, since free market forces will make sure that companies report reliable information.” Do you agree? Why or why not?

We partly agree with Bill on the point that corporate managers will disclose only reliable information when rational managers realize that disclosing unreliable information is costly in the long run.The long-term costs associated with losing reputation, such as incurring a higher capital cost when visiting a capital market to raise capital over time, can be greater than the short-term benefits from disclosing false information. However, free market forces may work for *some* companies but not *all* companies to disclose reliable information.

Note that Bill’s argument is based on the assumption that there is no information asymmetry between corporate managers and outside investors. In reality, the outside investors’ limitation in accessing the private information of the company makes it possible for corporate managers to report unreliable information without being detected immediately.

The E.U. and IASB standards attempt to reduce managers’ ability to record similar economic transactions in dissimilar ways either over time or across firms. Compliance with these standards is enforced by external auditors, who attempt to ensure that managers’ estimates are reasonable. Without the E.U., IASB standards, and auditors, the likelihood of disclosing unreliable information would be high.

Question 6.

Juan Perez argues that “learning how to do business analysis and valuation using financial statements is not very useful, unless you are interested in becoming a financial analyst.” Comment.

Business analysis and valuation skills are useful not only for financial analysts but also for corporate managers and loan officers. Business analysis and valuation skills help corporate managers in several ways. First, by using business analysis for equity security valuation, corporate managers can assess whether the firm is properly valued by investors. With superior information on a firm’s strategies, corporate managers can perform their own equity security analysis and compare their estimated “fundamental value” of the firm with the current market price of share. If the firm is not properly valued by outside investors, corporate managers can help investors to understand the firm’s business strategy, accounting policies, and expected future performance, thereby ensuring that the stock price is not seriously undervalued.

Second, using business analysis for mergers and acquisitions, corporate managers (acquiring management) can identify a potential takeover target and assess how much value can be created through acquisition. Using business analysis, target management can also examine whether the acquirer’s offer is a reasonable one.

Loan officers can also benefit from business analysis, using it to assess the borrowing firm’s liquidity, solvency, and business risks. Business analysis techniques help loan officers to predict the likelihood of a borrowing firm’s financial distress. Commercial bankers with business analysis skills can examine whether or not to extend a loan to the borrowing firm, how the loan should be structured, and how it should be priced.

Question 7.

Four steps for business analysis are discussed in the chapter (strategy analysis, accounting analysis, financial analysis, and prospective analysis). As a financial analyst, explain why each of these steps is a critical part of your job and how they relate to one another.

Managers have better information on a firm’s strategies relative to the information that outside financial analysts have. Superior financial analysts attempt to discover “inside information” from analyzing financial statements. The four steps for business analysis help outside analysts to gain valuable insights about the firm’s current performance and future prospects.

*• Business strategy analysis* isan essential first step because it enables the analysts to frame the subsequent accounting, financial, and prospective analysis better. For example, identifying the key success factors and key business risks allows the identification of key accounting policies. Assessment of a firm’s competitive strategy facilitates evaluating whether current profitability is sustainable. Finally, business strategy analysis enables the analysts to make sound assumptions in forecasting a firm’s future performance.

*• Accounting analysis* enables the analysts to “undo” any accounting distortion by recasting a firm’s accounting numbers. Sound accounting analysis improves the reliability of conclusions from financial analysis.

• The goal of *financial analysis* isto use financial data to evaluate the performance of a firm. The outcome from financial analysis is incorporated into prospective analysis, the next step in financial statement analysis.

• *Prospective analysis* synthesizes the insights from business strategy analysis, accounting analysis, and financial analysis in order to make predictions about a firm’s future.

Problem 1. The Neuer Markt

1. Do you think that exchange market segments such as the EuroNM markets can be a good alternative to venture capital? If not, what should be their function?
2. This chapter described four institutional features of accounting systems that affect the quality of financial statements. Which of these features may have been particularly important in reducing the quality of Neuer Markt companies’ financial statements?
3. The decline of the Neuer Markt could be viewed as the result of a ‘lemons problem.’ Can you think of some mechanisms that might have prevented the market’s collapse?
4. What could have been the Deutsche Börse’s objective of introducing two new segments and letting Neuer Markt firms choose and apply for admission to one of these segments? When is this strategy most likely to be effective?
5. In general, exchange market segments such as the EuroNM markets cannot effectively serve as an alternative to venture capital. Firms that obtain venture capital are typically firms with large information problems. That is, the degree of information asymmetry between these firms’ insiders and potential investors is high because start-up firms’ inside information is often highly proprietary (risk of other firms entering the same market) or their operating environment is highly uncertain and/or unstable. These information problems cannot be easily overcome by means of public reporting (because information is proprietary, the environment changes quickly, management has strong incentives to misreport, or management still needs to build a reputation etc.). Instead, venture capitalists obtain insider access to the firms’ private information and use their expertise to separate good from bad business ideas.

The function of the EuroNM markets should be to offer venture capitalists the opportunity to cash in on their investments once the start-up firms have reached a more mature development phase and their business idea has proven successful (i.e., there are less information problems). If this opportunity is available, venture capitalists will have a stronger incentive to screen and finance (smaller) business ideas.

1. (*Note that the four features are: accrual accounting, accounting conventions and standards, auditing, reporting strategy)*:
   1. Accrual accounting: the large investments in intangibles (goodwill, R&D etc.) and tangibles (PP&E, inventories) made by fast-growing, innovative start-up companies tend to make the difference between cash accounting and accrual accounting more pronounced.
   2. Accounting standards: Although International Accounting Standards (IAS/IFRS) and US GAAP tend to be considered high-quality standards, inexperience with these standards (both on the side of reporting firms and on the side of investors) might have reduced the usefulness of IFRA/US GAAP-based reports. Further, the IFRS were still under development during the late 1990s/early 2000s.
   3. Auditing: European auditors’ inexperience with international standards and the absence of strict enforcement in most countries may have reduced firms’ compliance with the accounting standards.
   4. Reporting strategy: the need for additional financing creates a strong incentive for management to overstate the value of its business idea.
2. Mechanisms that may have helped to prevent the collapse:
   1. Stricter admission criteria (accept only the more mature firms);
   2. Improve the enforcement of accounting standards (SEC-type enforcement);
   3. Make management more liable for its actions (i.e., reduce incentives to overstate performance).
3. One of the main objectives might have been to separate the lemons from the high-quality firms. If this strategy works, “lemons” (lower quality firms) should choose for a listing on the General Standard segment; high-quality firms should differentiate themselves from the lemons by voluntarily choosing for a more strict regime (i.e., apply for a listing on the Prime Standard segment). Of course, this signaling game only works if a listing on the Prime Standard segment is more costly for low-quality firms than it is for high-quality firms. This is likely to be the case when the enforcement of the admission, listing and accounting standards is strict, both in expectation and practice.

**Problem 2. Fair Value Accounting for Financial Instruments**

1. Discuss how the changes in the reclassification rules affect the balance between noise introduced in accounting data by rigidity in accounting rules and bias introduced in accounting data by managers’ systematic accounting choices.
2. The move from marking to market to marking to model during the credit crisis increased managers’ accounting flexibility. Managers of financial institutions may have incentives to bias their valuations of financial instruments. Summarize the main incentives that may affect these managers’ accounting choices.
3. Some politicians argued that fair value accounting needed to be suspended and replaced by historical cost accounting. What is the risk of allowing financial institutions to report their financial securities such as asset-backed securities at historical cost?
4. The reclassification rules intend to prevent that managers abuse their reporting discretion, that is, move financial instruments back and forth between categories to strategically time the recognition of gains or losses on these instruments. In doing so, however, the rules also prevent managers from making perfectly justified reclassifications. One could therefore argue that the rules are too rigid and, as such, introduce noise in banks’ accounting performance. Allowing reclassifications would reduce the noise caused by the rigidity of the rules but, at the same time, potentially increase the strategic bias in managers’ accounting decisions.
5. Managers of financial institutions may have (at least) the following incentives:
   1. Management compensation. Performance-related bonuses have been common practice in the financial industry. Managers of financial institutions may therefore be inclined to overstate the values of assets under their control in order to overstate their investment performance.
   2. Regulatory considerations. Banks are strongly regulated and need to meet strict capital requirements that are typically enforce by a central bank supervisor. Especially during economic downturns, bank managers have the incentive to overstate the value of assets to avoid violating capital requirements.
   3. Stakeholder considerations. An important group of stakeholders of a bank are the bank’s account holders. Strong declines in the bank’s asset values could create uncertainty among such account holders, increasing withdrawals, and in the worst case scenario cause a bank run. To avoid this, managers may be inclined to overstate assets.
6. Two potential drawbacks of historical cost accounting are:
   1. If historical cost accounting allows managers to delay the recognition of asset value declines as long as such declines are perceived as temporary, managers may avoid recognizing losses on financial instruments by holding on to these assets, while selling financial instruments with unrealized gains. This would help managers to (temporarily) overstate performance.
   2. The recognition of fair values of financial instruments on the balance sheet as well as fair value changes in the income statements improves the extent to which the balance sheet and income statement of financial institutions reflect the risk of the institutions’ investments.