# BEST PRACTICES FOR EQUITY RESEARCH ANALYSTS

## Essentials for Buy-Side and Sell-Side Analysts

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# Chapter 8

# Identify and Monitor a Stock's Critical Factors

The toughest part of the job is filtering out the material information from the noise.

*—Celeste Mellett Brown, a Morgan Stanley analyst with more than 11 years' experience*

The most distinguishing element of great analysts is that they put a disproportionate amount of time into forecasting only a few of the factors likely to move their stocks. This approach turns the traditional company analysis on its head because they're not attempting to know everything about their companies. The problem many analysts have is that they approach company analysis similarly to college students, highlighting all 300 pages of their textbooks to ensure that everything is understood for the final exam. Great analysts focus their time on only those questions that have been asked in prior exams or, due to a change in the environment, are likely to be asked on the next exam. A seasoned manager of analysts echoes this view with, "There's an opportunity for analysts to do a better job pre-defining the drivers of a stock and why investors own the stock."

Because this best practice requires that work be done on every stock within the assigned universe, it lends itself best to analysts who have a manageable number of stocks (e.g., *closely* follow 50 or fewer on the buy-side or 7 or fewer per team member on the sell-side).

## What Makes a Factor Critical?

Identifying mispriced stocks requires information not widely understood or accepted by the financial market. When this information will likely move a stock during the analyst's typical investment time horizon, we call it a *critical factor*. The best analysts focus the majority of their time on identifying and monitoring these critical factors to develop an edge. After all, there are many more factors that *will not* move a stock than *will*.

It can be a challenge to identify critical factors, especially for someone new to a sector, which is why I've created the criteria below. For an issue to be a critical factor, it should meet both of the following standards:

- Occur during the investor's typical investment time horizon.
- Have an associated catalyst that, when triggered, will cause the factor to become a greater opportunity or risk in the view of market participants. In most instances, this factor causes one or more of the following:
  - Material changes in earnings or cash flow growth.
  - Material changes in returns.
  - Material changes in the probability:
    - The company makes an acquisition.
    - The company is purchased by another entity.
    - There is a change in senior management.
  - Material change in the volatility profile of the stock.

Analysts will have different thresholds for measuring materiality based on their fund's objective, time horizon, and the sector being analyzed. We use 5 percent and 50 basis points as starting points to help illustrate this best practice. If the factor impacts the financial statements, determine if it will likely cause the market's expectations of:

- Earnings per share (EPS) or cash flow per share (CFPS) to change by more than 5 percent
- Return on invested capital (ROIC) or return on equity (ROE) to change by more than 50 bps (e.g., cause a company's ROIC of 10 percent to move to 9.5 percent or 10.5 percent)

If it doesn't explicitly result in a change to the near-term financial forecast, will it change:

- Investor confidence
- Any implied control premium

Identifying *materiality* is often a complicated and time-consuming process, but it's imperative in narrowing down the list of factors to those worth monitoring. Some level of research is usually required to determine if a factor meets the materiality threshold. Here are some examples of factors that could easily be mistaken by the broader market as critical even though additional research would prove otherwise:

| The market believes: | Which is true if: | But is not a factor if: |
|---|---|---|
| All airlines will be negatively impacted by higher fuel prices. | An airline doesn't hedge fuel and can't pass along fuel inflation to customers. | An airline successfully passes along fuel inflation in the form of fuel surcharges. |
| A coal company will benefit substantially when coal prices suddenly increase 10%. | The company has coal to sell in the spot market. | The company has locked up all of its sales for the next two years with long-term contracts. |
| A global technology company will be hurt when it's forced to divest its subsidiary in an important developing country. | Revenue from that country is profitable and makes up a material portion of the company's EBIT. | The company loses money within that country, with no sign of improvement over a reasonable investment time horizon. |

Throughout my career, a significant portion of the questions and concerns raised by investing clients initially appeared to them as critical factors, but upon more thorough research, did not meet the materiality threshold. For those who spent time being concerned with these noncritical factors, they were taking time away from efforts to forecast the real critical factors.

To illustrate this point further, here are common examples of factors that often don't meet the critical threshold and yet investors spend significant time analyzing them:

- A company makes an acquisition that is neither accretive or dilutive and doesn't change the company's long-term earnings power.
- A company shuts down or opens a plant, all part of a long-term strategy that won't change consensus earnings expectations.
- A company expands into an international market that's too small to have a material impact during a typical investment time horizon.
- A company wins a new customer contract that's too small or is signed at such attractive rates for the customer that it's not likely to materially move earnings or returns.

## Financial Metric and Valuation Anomalies Can Help in Finding Critical Factors

Your first step in identifying and monitoring critical factors should be to dedicate a portion of your notetaking system (electronic or paper-based) to *factors* (some of which will be labeled *critical* in a later step) and their catalysts. As each new factor is discovered, put it and its catalyst in this central location so they're all easy to reference in the future. You'll want to dedicate a place for factors specific to each company as well as those that could impact an entire sector. For example, if you're researching the auto sector, you'll probably want *unionized labor* listed both as a potential sector-level and company-level factor, because certain union issues impact all companies while others pertain to only one.

With a space set aside in your notes, start by going back to your sector analysis in the earlier best practice, and begin breaking out the financial data on a company basis, specifically look at how each company's *financial metrics* and *valuation levels* changed during periods of substantial outperformance or underperformance, relative to its peers and the broader market.

In this next step, it's important to note that there are two elements of financial metric and valuation analysis, *historical* and *current*. The historical element obviously lends itself better to companies with long track records, which due to the natural lifecycle of a business, often equates to value stocks. The current element of the analysis is important for all stocks, but especially for growth stocks because so many of their critical factors are driven by the factors surrounding the company's sustainable growth rate.

Review the key financial data for at least the past 10 years on an annual basis, and go back even further if you want to explore how the stock performs at the trough and peak of multiple cycles. (This may not be as necessary for growth stocks as it will be for value stocks.) Personally, I prefer to get financial information directly from the company's regulatory filings for each year because I'm assured there's been no manipulation of the data, which is done by some data providers, although this takes time that some analysts don't have. The human mind isn't very good at deciphering anomolies buried in a page filled with numbers, which is why it's often helpful to create a dedicated spreadsheet and graphs that show the compound annual growth rate (CAGR) of the key financial metrics, such as revenue; earnings before interest, taxes, depreciation, and amortization (EBITDA); EPS; CFPS, capital expenditures; and depreciation, depletion, and amortization (DD&A). It's also important to review the change in returns over the time period. Using the DuPont return on equity (ROE) analysis is a good way to see how returns have changed over time based on the three important factors. Also look for the accounting anomolies discussed later in Chapter 14.

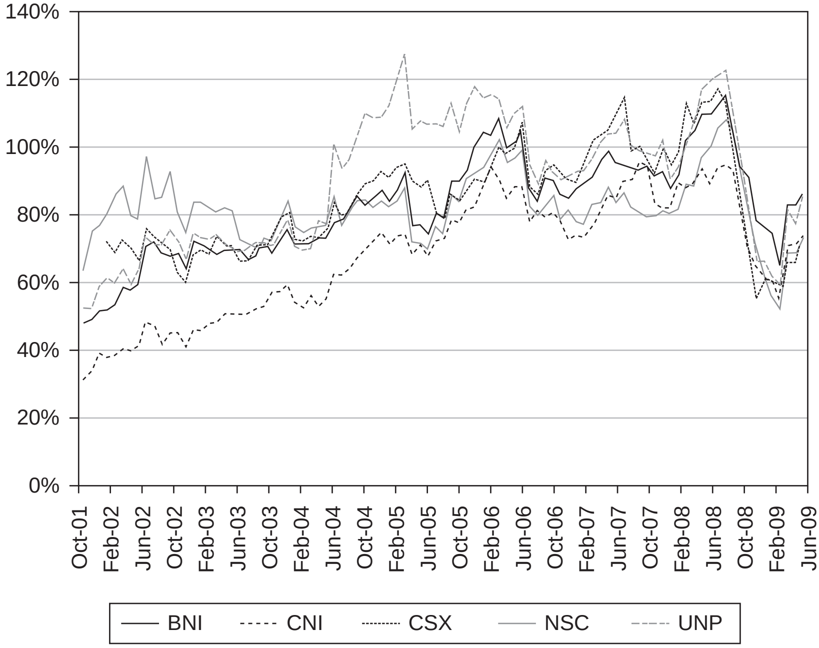
Similar to the financial metric analysis, go back to your sector work on *valuation* to conduct a company-level historical valuation analysis. You're attempting to identify the typical valuation level the market has historically afforded each of your stocks, and how it has changed over time, relative to the market and its peers. An example would be to look at forward-looking relative price-to-earnings (P/E) ratios (based on consensus estimates) for each of your stocks going back at least 10 years, such as in Exhibit 8.1. Anomolies should be explored to ensure that they are fully understood. If time permits, conduct a basic statistical analysis of historical data to spot trends, as discussed in Chapter 12.

After analyzing the historical valuation data, do the same for the current valuation level in an effort to answer the question, "What's in the stock?" *This isn't intended to be an exhaustive valuation exercise*, but rather to help frame your quest for critical factors. The goal is to identify the key assumptions that have influenced valuation in the past and are necessary for the company to achieve consensus expectations for this year and the next (and possibly beyond for those with a longer investment horizon).

To help illustrate this effort, Exhibit 8.1 shows the relative P/E ratio for five major North American railroads on a forward-looking basis (e.g., the data point for January 2005 is the stock price from that month divided by consensus EPS expectations for the next 12 months all divided by the forward-looking P/E ratio of the S&P 500). Looking at this exhibit, a few questions should jump to mind:

- What caused CNI's significant discount to its peers to erode away over the 10 years?
- What caused NSC to lose the premium it commanded to its peers in the past?
- What caused UNP to trade at such a premium to its peers from 2004 to 2006?
- For the most recent time period, why are BNI and UNP trading at such a premium to CNI, NSC, and CSX?

**Exhibit 8.1** Forward-Looking Relative P/E Ratios for Major Railroads Operating in the United State (relative to the S&P 500)






## Finding the Answers

One of the fastest ways to get answers to questions surrounding *historical* financial metrics and valuation anomolies is to speak with someone who has closely watched the stocks during that time period. You'll need to prepare for these discussions by analyzing the historical data; avoid being ill-prepared, as it will show a lack of respect to the individual and you may have only one opportunity to speak regarding this line of questioning. Keep in mind that you're not trying to understand every aspect of the company but rather just the factors and catalysts that caused major changes to the company's financial metrics and valuation levels in the past; more thorough research into the company's future prospects will take place later. The best sources for *preliminary* information that should be reviewed before having any discussions include:

- Company documents. (There is likely to be information in the management discussion and analysis [MD&A] section of the regulatory filings to help explain major changes in its financial metrics.)
- Financial news written at the time of major stock moves.
- Trade industry journals or websites that include articles written at the time of major stock moves as well as year-end reviews or an annual outlook.
- Internal documents written by the analyst following the stock at the time of a major stock move.
- Buy-side only: sell-side reports written at the time of a major stock move.

While the company can provide a treasure trove of information, it comes from the company and so it's likely to be biased in its favor. As a general rule for any best practice, try not to rely solely on the company's perspective when looking for objective answers.

After conducting preliminary research, explore the information sources below to get responses as specific as possible regarding *financial metrics* and *valuation* anomolies that have taken place in the past, as well as why the stock currently stands where it does relative to its peers and the broader market. (See Exhibit 9.1 for the pros and cons of information sources.) The objective is to identify the *critical factors that moved the stock in the past* and *the current assumptions critical for the stock to achieve current consensus expectations*:

- Investor relations (IR) contacts are usually very good with the basics because their full-time job is to educate investors about their company. But don't use the IR contact as your sole source of information because you'll likely find the IR contact biased in the company's favor.

- For buy-side analysts:
  - Speak with portfolio managers, other analysts, or traders within your firm who were responsible for the sector or put the stocks in the portfolio in the past.
  - Speak with sell-side analysts and salespeople who have been familiar with the sector for an extended period of time.
- For sell-side analysts, speak with seasoned internal salespeople or traders. Salespeople may put you in touch with seasoned buy-side clients who can offer their perspective, but this should be done sparingly because as your firm's clients, they're doing you a favor.
- If you have the time and resources:
  - Speak with seasoned experts who would likely be familiar with the types of critical factors that move a stock, such as the company's competitors, seasoned executives who recently left their firm, and consultants who specialize in the sector.
  - Some financial journalists, individuals at forecasting services, and bloggers can be helpful if they've followed the sector for a long period of time and understand at least the basics of valuation.

Let's explore each one of these in a bit more detail. I cringe a bit when offering advice to call IR contacts, because they're not always on the pulse of market psychology. Unfortunately, some firms put individuals into the IR role as gatekeepers to provide the bare minimum of service, such as distributing company information and answering basic questions. These individuals often won't understand the factors driving their stock or current consensus thinking. But there is another breed of IR contact, who is actively engaged in the markets, speaking with some of the savviest investors and seasoned sell-side analysts on a regular basis. These individuals can be helpful in understanding the historical and current market thinking about their stock. They may try to sugarcoat the negative issues, but you'll likely see through this after asking a few pointed questions about your downside scenarios. If every answer to your question results in a positive outcome, you know the person doesn't have a balanced view. But the contact can still be helpful, especially if you ask direct questions such as, "What are the key assumptions in consensus for next year?" The speed and thoroughness of the response should give you an idea of how well he or she is plugged into the financial markets.

Experienced buy-side analysts and PMs who own the stock, or have owned it in the past, should have a good understanding of historical factors and provide the best feel for the key assumptions in current consensus thinking toward a stock. If you're on the buy-side, clearly you can approach your internal colleagues to answer your questions, but you might be surprised to know you can also approach buy-side analysts at other shops. They are often willing to speak because they want to expand their network of investors who traffic in their names, all in an effort to keep a hand on the pulse of investor psychology. The best way to make these buy-side-to-buy-side connections is to speak with a sell-side salesperson or make an effort to meet other buy-side analysts at investor events.

If you're on the sell-side, the challenge in questioning the buy-side is that they may not be willing to speak to you because they may have a proprietary view about the stock. For this reason, you may want to start with buy-siders who don't currently own the stock to get their view of the critical factors; they'll be less defensive about your motives. Sell-side salespeople are helpful in connecting you with the "smart money," namely, those investors who they believe are in the know on a stock.

If you're on the buy-side you also have the benefit of calling sell-side analysts to get their view about critical factors. Make sure to speak with seasoned analysts because the rookies will still be feeling out the factors. Also make sure to separate the analyst's view from the consensus view; sell-side analysts pride themselves on being out of consensus, and so you need to keep them on task if you're trying to identify "what's in the stock."

Sell-side salespeople are responsible for having at least a cursory understanding of all the stocks covered by their firm. Although this is sometimes over 1,000 stocks, each salesperson often has a number of sectors or stocks they know better than others. You can usually tell in the first few seconds when discussing a stock if the salesperson traffics in the name. If so, the salesperson should have a view in terms of what's in the stock, based on conversations with clients.

Sell-side analysts can openly speak with the internal trader of their stocks, which makes them a great resource when attempting to understand historical and current thinking. The limitation to speaking with traders is that they are often short-term thinkers, sometimes only looking out a few days or even just a few hours. For this reason, don't expect the typical trader to have a 12- or 18-month forward view. Due to the number of stocks they trade, they also may not have as much detail as you want.

When you're speaking with any of these market participants be careful not to tip your hand if you're beginning to develop a proprietary view on a critical factor. If your work shows that western coal pricing is likely a critical factor, and your forecast has it increasing 10 percent, don't ask them, "Do you think the production problems could lead to a 10 percent increase in coal prices?" Instead ask something like, "What is the current consensus thinking in terms of coal pricing for next year?"

## Create a Short-List of the Best Critical Factors

Having discussions with these market participants, combined with your earlier research, should help identify the factors that have moved your stocks in the past or are most likely to do so in the future. The challenge now is to distill the list of factors down to a manageable size. When stocks substantially outperform or underperform an index it's often the result of just one factor; the trick is to determine which one, well in advance. In order to create an edge, analysts must narrow down their list of factors to those that have good catalysts. Bill Van Tuinen, a seasoned buy-side analyst, looks for catalysts that are big enough to overcome the risks. If a critical factor's catalyst is a broad-based macro event difficult to forecast, such as GDP or oil prices, it will be almost impossible to gain an edge over the market. As such, look for catalysts that can be identified and quantified through comprehensive research, such as determining the timing and likelihood of new industry regulations or the probability that a company's new product will be successful. Some of the more common places to anticipate catalysts include the following:

- Company-sponsored analyst meetings and calls
- Earnings releases
- The company's annual pricing, volume, or earnings guidance or projection
- Deadlines for new legislation, regulations, or court case outcomes
- Pre-scheduled announcements by the company's customers, competitors, or suppliers
- New product releases or significant product extensions
- Interim sales data for the company or the sector

Analysts should put dates for these events on their calendars and attempt to have a view on the event if it's likely to include a catalyst that impacts one of the critical factors.

Rank the list of sector and company factors collected to this point, using the following criteria:

- The level of materiality (e.g., impact on the financials or changes in the probability of a major corporate event)
- The likelihood that the catalyst can be forecast over the investment time horizon

The best two to four critical factors should be the topics of the analyst's focus.

Narrowing down a list of factors to only those that are critical is important for time management purposes as well as for picking stocks. For example, FedEx's stock dropped in late 2003 when it announced the Kinko's acquisition, even though it wasn't likely to impact the company's earnings power or returns over a typical investor's time horizon. Instead, the real critical factor was the company's effort to improve margins within its core operations, which ultimately allowed FedEx to beat expectations and caused its stock to outperform the S&P 500 and UPS substantially over the next one-, three-, and five-year periods. In isolation, the company paid too much for Kinko's, as evidenced by future write-offs, but it was a minor issue compared with improvements in the company's core operations in driving the stock's performance.

## Optional Step: Meet with Management

By design, my process of identifying critical factors has yet to involve an in-depth company analysis because I don't want to get buried in the weeds researching issues that haven't impacted, and aren't likely to impact, the stock price. As Adam Longson, an analyst at Morgan Stanley with a CFA and CPA, put it, "The focus should be more on the stock than the company." For analysts who have the time and resources to meet with management (this is strongly advised for buy-side analysts and absolutely required for sell-side analysts), additional preparation is required, which involves a basic level of company analysis. It's important to meet with company mangement to understand if it's aware of the critical factors on the analyst's list and to determine if there's a plan to exploit or mitigate them.

By following the recommendations in Chapter 5, the analyst should be in the queue to meet with management (e.g., at its office, the fund's office, investor conference). To get the most from a management meeting, the analyst should conduct preliminary research to answer the questions highlighted in Exhibit 8.2. The level of research before a meeting is almost completely dependent on the analyst's time, but at a minimum, the strategy questions should be explored because they are so critical to almost every investment thesis. The information sources selected for each question in Exhibit 8.2 are considered the *best place to start*, but if an information source isn't selected it doesn't mean it can't help answer the question (Due to limited time, analysts should start first with sources likely to provide the best answers.) As discussed later in Chapter 10, an analyst wants to appear as knowledgable as possible about a company's strategy and competitive advantage when meeting management in order to take the discussion to its highest level. There are certain questions that should be avoided because they show lack of preparation, such as those that could be answered by reading a basic company presentation or regulatory filing, or aren't likely to be answered by management. (See the blank boxes in Exhibit 8.2 in the column titled Appropriate to Ask Executives at Meeting.) The exception to the "be prepared" rule is when an analyst is asked to take a meeting with company management (usually a small company) at the last minute, which occassionally happens; sell-side salespeople have been known to contact buy-side analysts at the last minute to offer up a company management meeting if a spot opens up during a road show or at a sell-side sponsored conference.

**Exhibit 8.2** Best Practice (Knowledge): Questions to Investigate before or during Interviews with Management

| | Questions to be investigated | Company documents, data, and website | Market data & news provider | Industry trade journal or website | Economic data | Company investor relations contact | Sell-side report or model (for buy-side analysts) | Customer of or supplier to the company | Information from forecasting service | Consultant, expert, or company retiree | Sell-side analyst (for the buy-side) | Appropriate to ask executives at meeting |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Start with this source to investigate before meeting management | | | | | | | | | | |
| STRATEGY | How does the company create value for its customers and shareholders? | ● | | | | ● | | ● | | ● | ● | |
| | What is the company's competitive advantage? | ● | | | | ● | | ● | | ● | ● | ● |
| | What are the risks to the company maintaining its competitive advantage/returns? | ● | | | | ● | | ● | | ● | ● | ● |
| | How does the company's strategy differ from its competitors? | ● | | | | ● | | ● | | ● | ● | ● |
| | Which lines of business are the most and least valuable? | ● | | | | ● | ● | | | ● | ● | |
| | Which lines of business are seasonal, cyclical, defensive, or growth? | ● | | | ● | ● | ● | | ● | ● | ● | |
| | Which lines of the business are going through transition? | ● | ● | | | ● | ● | ● | | ● | ● | ● |
| | Where are the best areas of investment outside of the company's core business? | ● | | | | ● | | | | ● | ● | ● |
| | Is management a good capital allocator (does the company earn its COC over a cycle)? | ● | ● | | | | ● | | | | | |
| | What are the biggest mistakes being made by the competition? | | ● | ● | | ● | ● | ● | | ● | ● | ● |
| | Are there any material regulatory or legal risks that could impact margins or growth rates? | ● | ● | ● | | ● | | | | ● | ● | |
| FINANCIAL | Why have key financial metrics changed materially over the recent past (e.g., 2–3 years)* | ● | ● | | | ● | ● | | | ● | ● | |
| | What are the key assumptions for the company to achieve consensus expectations? | ● | | | | ● | ● | | | | ● | ● |
| | Has the company made, or intend to make, any changes to its accounting policies? | ● | | | | ● | ● | | | | ● | ● |
| | How will the company finance future capital needs? | ● | | | | ● | ● | | | | ● | ● |

*Such as growth rates of EPS, FCF, and revenue as well as material changes in margins, ROIC, and ROE

*(Continued)*

**Exhibit 8.2** Best Practice (Knowledge): Questions to Investigate before or during Interviews with Management *(continued)*

| | Questions to be investigated | Start with this source to investigate before meeting management: Company documents, data, and website | Market data & news provider | Industry trade journal or website | Economic data | Company investor relations contact | Sell-side report or model (for buy-side analysts) | Customer of or supplier to the company | Information from forecasting service | Consultant, expert, or company retiree | Sell-side analyst (for the buy-side) | Appropriate to ask executives at meeting |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| REVENUE | Does the company or its competitors have pricing power? | ● | | | | ● | ● | ● | | ● | ● | |
| | How does the company set pricing? | | | | | ● | | ● | | ● | ● | ● |
| | Have there been any major customer wins or losses recently? | | ● | ● | | ● | | | | ● | ● | ● |
| | Which factors are most likely to cause a material change in demand? | | | | | ● | ● | ● | ● | ● | ● | ● |
| | Where will growth come from (economic, market share gains or new markets)? | | | ● | | ● | ● | ● | ● | ● | ● | ● |
| | How is the company positioned in the highest and lowest margin market segments? | | | ● | | ● | ● | ● | | ● | ● | ● |
| COSTS | Are there likely to be any changes to the company's cost structure beyond typical inflation? | | | | | ● | ● | ● | | ● | ● | ● |
| | Are there any major productivity initiatives? For publicly-stated targets, are they net of inflation? | ● | | | | ● | | | | | ● | ● |
| | Where is the company making its major investments? | ● | | | | ● | ● | | ● | ● | ● | ● |
| | How is management compensated and is it likely to change? | ● | | | | ● | | | | | ● | ● |
| MGMT | How does the quality of this mangement team compare to its competition? | | | | | | | ● | | ● | ● | |
| VALUATION | How does the company's valuation differ from the past and currently from its peers? | | ● | | | ● | ● | | | | ● | |
| | Is there anything misunderstood by the market that is distorting the company's valuation? | | | | | ● | ● | | | | ● | ● |
| | Are there any catalysts likely to impact valuation over a typical investment time horizon? | | | | | ● | ● | ● | | ● | ● | ● |

Exhibit 8.3 includes a list of the documents that are most helpful when collecting information for a meeting with management, ranked in order of importance.

**Exhibit 8.3** Best Practice (Knowledge): Documents to Review before Interviewing Management

| Document | Purpose |
|---|---|
| Analyst's critical factors and catalysts list. | Ensure focus of preparation is on topics that pertain to critical factors and their catalysts. |
| Most recent annual regulatory filing (e.g., 10-K) and past two quarterly filings. | Understand MD&A and any discussion of risks. Good to know management bios. Use services that show changes since prior filing such as Blackline, 10-K Wizard, and Bloomberg). |
| Earnings model with a minimum of five years of historical data and two years forward projections. Current year should include quarterly data. | Focus on the forecast, especially where it differs from the historical trends. |
| Full list of sell-side earnings estimate projections, ranked from highest to lowest (EPS or FCF). | Understand the reason for the range of estimates and how the analyst's own estimate differs from consensus. |
| Transcript of the two most recent quarterly company presentations. | Develop insights about critical factors and catalysts. |
| Personal or colleague's notes or reports generated from prior meetings or calls with management (preferably within the past two years). | Reviewing in reverse chronological order, look for insights about critical factors and their catalysts. |
| Buy-side only: sell-side reports highlighting ratings changes or think pieces over the past year. | Identify the critical factors and catalysts surrounding investment controversies. |
| Company presentations from conferences over the past six months. | Develop insights about critical factors and catalysts. |
| Analyst's (or third party's) historical valuation analysis. | Determine where the company's stock trades now relative to its past, its peers, and the overall market. |
| Analyst's (or third party's) historical capacity and demand analysis. | Identify historical changes in market share. |
| Information on corporate restructurings or M&A. | Understand any major restructurings or M&A. |
| List of the top 20 shareholders. | Identify the style of the current holders. |
| Information from the company's "investor" portion of its website that isn't in any of the documents above. | Ensure no important piece of information is overlooked. |

## Monitor Critical Factors

The short list of two to four critical factors per stock and their catalysts become the foundation for all proprietary work in an effort to forecast the direction of stock prices better than the market. The next step in this process is to set up a network for monitoring the critical factors to develop a better forecast (e.g., creating a financial forecast and identifying catalysts) than the broader market. This network should go well beyond the market participants mentioned above because *identifying* a factor that moved a stock in the past requires a different skill than providing information to help *forecast* the future movement of a stock (e.g., the investor relations manager who helped explain why a company's stock underperformed during the past isn't likely to be as helpful in forecasting its future performance). See Exhibit 9.1 for details about the types of information sources to use for this next step in the process.

Approach your information sources with a strategy, namely seeking out insights rather than waiting for them to surprise you in the form of an unexpected announcement from one of your companies. The strategy employed by Bill Greene, a Morgan Stanley analyst with more than 12 years of sell-side experience, is to "find something where you disagree with consensus and explore to see if it could make a difference in the stock." One of the most gratifying experiences as an equity analyst is watching a stock react to a catalyst you forecast, well in advance of the market. Investigate the critical factors in order to refine your upside, downside, and base case scenarios (a process discussed later in Chapter 18).

To ensure that you're contacting your information sources in a timely manner on the topics that are likely to move your stocks, create a matrix of critical factors, issues to explore, potential catalysts, contact sources, and frequency of discussion. Review the list regularly to ensure that you're staying ahead of the competition on the critical factors likely to drive your stocks. Here is an example:

| Critical Factor | Issue to Explore | Potential Catalysts | Contact Source | Frequency |
|---|---|---|---|---|
| Price of western coal | Supply and demand | Publicized discussions from upcoming industry conference | Bill Smith, industry consultant | Monthly |
| Salary and wage expenses | Inflation level for upcoming labor contract | Outcome from upcoming union negotiations | Ann Thompson, union officer | Monthly |
| Size of fall grain harvest | Impact from weather conditions during growing season | Release of monthly government crop condition reports | Dawn Johnson, agriculture consultant | Weekly, from early June to early September |
| Financial community sentiment about a potential change in management | Is it priced into the stock that the CEO will leave soon? | Upcoming sell-side hosted dinner with CEO | Ken Lee, sell-side analyst | Monthly |

There's an art to conducting the interview, which is discussed in Chapter 10.

## Be on the Lookout for New Critical Factors

"The only constant in life is change."* An analyst's job would be much easier if the initial list of critical factors never changed, but that's unrealistic. In fact, once an analyst has identified two to four critical factors per company along with sources of insights to forecast these factors, the next significant part of the job is to identify new critical factors.

* This quote is attributed to the philosopher Heraclitus (535–475 BCE).

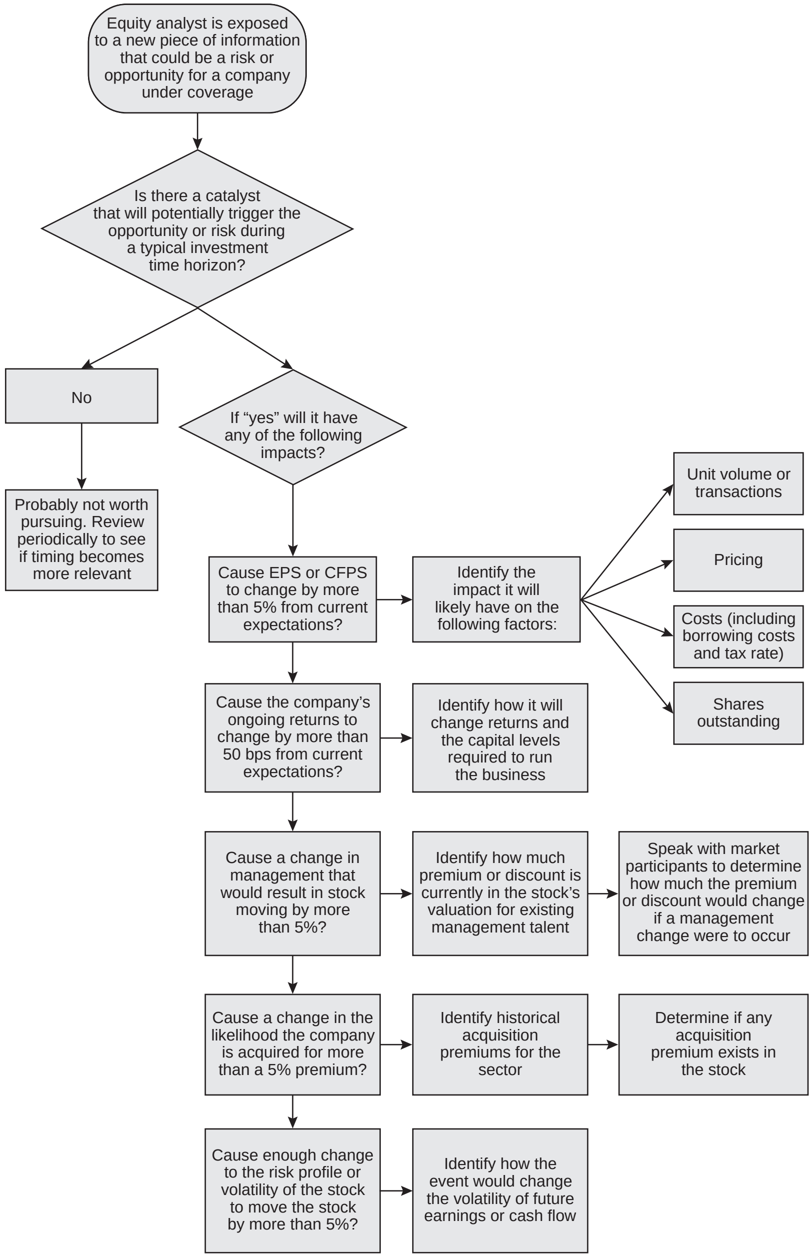
For most analysts, almost every day will include a new piece of information that could lead to an additional critical factor. To remain on task and efficient with time, an analyst should use the flow chart in Exhibit 8.4 to determine if a new critical factor has emerged:

1. Determine if new information is more likely to be an opportunity or risk.
2. Briefly surmise the potential impact on the stock from this factor:
   a. Likely to occur within investment time horizon?
   b. Material (e.g., move financials more than 5 percent)?
   c. Will be triggered by a catalyst that can be forecast?
3. If the factor meets the criteria above, determine if it's not yet in the stock in terms of consensus expectations or the valuation multiple.
4. If it meets all of the criteria above, it likely warrants further research to determine if it's a critical factor.

For illustrative purposes, let's say you're picking up Canadian National, a major railroad operating in Canada and the United States. After reviewing all of the relevant company information and news stories, and speaking to industry and company experts, you've created your list of two to four critical factors. But then, as part of your ongoing monitoring of information, you come across these potential opportunities and risks:

1. As you read about the stronger Canadian dollar, you wonder if it may slow exports the company hauls to the United States because the products are essentially becoming more expensive for Americans.
2. An internal colleague tells you that one of his industry sources believes the Canadian government may attempt to re-regulate the sector.
3. While reading a trade journal, you discover the company has sole access to a new container port being constructed on the Canadian west coast.
4. You read a story on the news wire stating this fall's Canadian grain harvest, which the company hauls, will be down to 5 percent.

**Exhibit 8.4** Best Practice (Skills): Flow Chart of Ongoing Activity for Identifying a Critical Factor



Should all of these points be added as new critical factors? By following the steps in Exhibit 8.4, you determine the following scenarios aren't critical for the following reasons:

1. Your research reveals the company's debt is denominated in U.S. dollars and your firm will own the stock in U.S. dollars, which both *benefit* from a stronger Canadian dollar. In addition, a stronger Canadian dollar historically stimulates more U.S. exports to Canada which are hauled by the company. Based on a historical analysis, these factors almost fully mitigate the impact of potentially slower exports to the United State.
2. Your research reveals that it will take at least three years before the government gets serious about re-regulation, which is well outside of your investment time horizon.
3. Your research reveals the container port will add only 1 percent of new revenue when it opens in 18 months, which is too small and far out in time to have a major impact on the stock during your investment time horizon.
4. Your research reveals the Canadian grain harvest, while important, is less than 10 percent of the company's revenue, and so even if it's down 5 percent, it's not likely to cause a collapse in the stock.

Dispelling these factors as not critical takes time, but once they're taken off the list, an analyst can ignore most of the noise surrounding the non-factors, thus freeing up time to focus on the real factors likely to move the stock. This isn't to say never look at any of these factors again, but only if something changes their importance. Periodically challenge yourself to ensure you haven't become complacent. Similarly, as you're periodically reviewing your list of critical factors, make sure to remove those that have played out as expected or no longer meet the criteria discussed above.

While all analysts should avoid being distracted by factors that have been ruled out as critical, sell-side analysts may need to keep some on their front burner due to client interest. For example, even though demand for ethanol was increasing in the late 1990s and early 2000s, I knew it wouldn't amount to more than 2-3% of the railroad industry's revenue during the next 3-5 years. Eventually I had to write about the topic to illustrate to clients why it wasn't a critical factor. Sell-side analysts shouldn't confuse this effort of *marketing to clients* with conducting research for stock picking.

It's worth noting that this best practice is focused on *identifying* and *monitoring* critical factors, which is only part of the process towards identifying insights and making stock recommendations. Critical factors are important elements of best practices discussed later in the book:

- Chapter 9. Create Sustainable Proprietary Sources of Insight
- Chapter 10. Get the Most from Interviewing for Insights
- Chapter 13. Conduct Surveys to Acquire Unique Insights
- Chapter 18. Forecast Scenarios for the Most Important Critical Factors

In closing, here are some considerations I picked up from other research analysts and portfolio managers in terms of seeking out critical factors:

- You're not looking for data points but rather changes in trends.
- Don't "go underground" when conducting research; get out there and learn by having conversations. Inexperienced analysts hide in their spreadsheets, which fails to get them out into the debate.
- You can't do this on your own, especially when you're new. You'll need to ask for help from:
  - Colleagues in your firm
  - Investor relations
  - Sell-side (if on the buy-side)
  - Industry contacts
- "The market often over-simplifies the investment thesis, which offers us an opportunity."

**Exhibit 8.5** Best Practice (Skills): Identify and Monitor a Stock's Critical Factors

1. Instead of approaching traditional company analysis with the intention of learning everything about a company, concentrate the effort just on the critical factors likely to move a company's stock. This allows the analyst to better allocate time and be a better stock picker.
2. For a factor to be *critical* it will likely meet these criteria:
   a. Occur during the investor's typical investment time horizon.
   b. Have an associated catalyst that, when triggered, will cause the factor to become a greater opportunity or risk in the view of market participants. In most instances, this factor causes one or more of the following:
      (1) Material changes in earnings or cash flow growth.
      (2) Material changes in returns.
      (3) Material changes in the probability:
         (a) The company makes an acquisition.
         (b) The company is purchased by another entity.
         (c) There is a change in senior management.
   c Material change in the volatility profile of the stock.
3. Dedicate a place in your notes to compile the critical factors (and their catalysts) for each company and sector. It's important to have this information in one easy-to-reference place.
4. Following similar steps as the *sector* analysis conducted in Chapter 7, but this time at the *company* level, identify and understand the historical (10 years or more) cause of anomalies or fluctuations to each company's:
   a. Financial metrics in absolute terms and relative to its peers.
   b. Valuation levels relative to its peers and the market.
5. Record the events that caused these historical anomalies as factors (on a company or sector level) as well as the catalyst that triggered the event (e.g., stronger customer pricing is the *factor*, while the *catalyst* is an upside surprise at the company's upcoming quarterly earnings release).
6. Review current valuations to identify what's in the stock, in terms of current expectations. Record the factors that drive key assumptions necessary for each company to achieve consensus expectations.
7. For analysts who have the time and resources, meet with company management to understand if it's aware of the analyst's critical factors and determine if there's a plan to exploit or mitigate them. Ask appropriate questions during the meeting as highlighted in Exhibit 8.2, and prepare in advance by reviewing the documents discussed in Exhibit 8.3. Use the meeting as an opportunity to prioritize critical factors.

8. Of all the factors recorded, rank them in terms of impact on earnings and cash flow over a reasonable investment time horizon (e.g., 6 to 12 months). Those that are most likely to move consensus EPS or CFPS by 5 percent or more are generally among the better candidates for critical factors.
9. Identify potential catalysts for the more significant critical factors. Those with catalysts that can be identified and forecast through detailed research are usually the best critical factors for the purpose of stock picking (e.g., it's much more difficult to forecast the next recession than assess a company's likely success or failure with a new product launch).
10. Aggressively monitor your network of information sources to forecast the catalysts for two to four critical factors (for each company) better than the broader market.
11. Over time, add new critical factors to the list and remove old ones, based on their probability to move EPS or CFPS by your threshold. To remain on-task and efficient with time, an analyst should follow the subsequent process to determine if a new critical factor has emerged:
    a. Determine if new information is more likely to be an opportunity or risk.
    b. Briefly surmise the potential impact on the stock from this factor:
        (1) Likely to occur within investment time horizon?
        (2) Material (e.g., move financials more than 5 percent)?
        (3) Will be triggered by a catalyst that can be forecast?
    c. If the factor meets the criteria above, determine if it's not yet in the stock in terms of consensus expectations or the valuation multiple.
12. If it meets all of the criteria above, it likely warrants further research to determine if it's a critical factor.