

PART

One

Introduction to the Applied Portfolio Management Class

Lots of universities have investment management classes that manage money. Some are older than our program, some have more assets under management, but we feel that the Applied Portfolio Management (APM) class at the University of Kansas is unique in the quality of the information that the students receive. “Quality of information” isn’t exactly the catchiest slogan, but for investors the quality of the information is the key difference between average returns and extraordinary ones. Information drives the investment process. Getting great information and evaluating and interpreting it correctly is a major theme in the APM class.

In the first part of this book, we outline how we’ve gotten to where we are today and how what we do is different. In Chapter 1 we review how the class started and how it’s changed. What worked that we kept and what changes we’ve made to make it better. “Investing is dynamic” is a phrase that APM students hear frequently. Teaching young investors is dynamic also. In Chapter 2 we discuss how the class guidelines work now. They will almost certainly evolve as we think of new and better ways to combine investing and teaching investing. In Chapter 3 we review finance theory and how breakdowns in the theory create investment opportunities. In Chapter 4 we illustrate “surface analysis” and how in the APM class, we try to make sure that we rely on the best-quality information in our investment decisions.

CHAPTER 1

APM History

When the Applied Portfolio Management (APM) class started, there were not a lot of student-managed portfolios. There were no “best practices” to follow. We think it’s instructive to go through the history of the APM class because in designing the class, we’ve helped educate many future successful investors. As a class, we’ve also succeeded in generating great returns. We’ve also had a firsthand look at the thinking of beginning investors. Through the APM class, we’ve learned a lot about the mistakes typical investors make, and we think our experience in helping students overcome these mistakes is useful to all investors.

In managing their own portfolio, individual investors make many of the same mistakes that students make at the beginning of the semester. Fortunately, it didn’t take too long to hit upon a workable strategy for the APM class that encourages what we consider the right kind of decision making—one that makes money over the long term. We’ve managed to earn a great return over the last 13 years. APM began with \$230,000. As of this writing in mid-2007, the portfolio is valued at close to \$1.5 million. That’s an annual rate of return of more than 20 percent, 10 percent per year higher than the return on the NASDAQ index or the Standard & Poor’s 500 Index (S&P 500). Figure 1.1 shows how APM’s return has compared to NASDAQ’s over the life of the portfolio.

The class strategy has changed over time. During the 1990s the portfolio strategy was more event driven. Now we have a more value-oriented buy-and-hold philosophy. The philosophy has changed because market conditions have changed. In class we focus on understanding what’s going on in the market, what’s happening in a company, and how those events can interact to create investment opportunities.

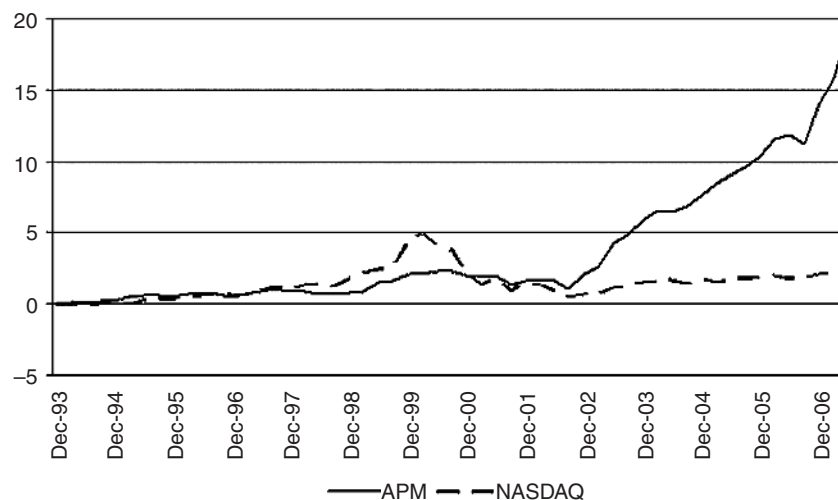


FIGURE 1.1 Cumulative APM Return vs. NASDAQ Return 1994–June 2007

IN THE BEGINNING

Kent McCarthy retired from private client services at Goldman Sachs in 1993 at the ripe old age of 35. At the time he retired, he was the largest producer ever for Goldman Sachs Private Client Services. He generated those fees because he decided to base his business on generating performance for his clients. He found good investment returns for his clients in many overlooked areas. Kent felt that the Japanese market was overvalued and Hong Kong stocks were undervalued. Consequently, he managed more trades with the Hong Kong Exchange than anyone else at Goldman. That time marked the beginning of his love affair with China.

He was ready for a change and decided to come back to his undergraduate alma mater, the University of Kansas, to teach classes about investing. He donated \$230,000 to start the APM class. Professors Allen Ford, Jack Gaumnitz, and Paul Koch were instrumental in persuading the faculty and administration to accept Kent's seed money for the portfolio. The KU Endowment Association didn't rush to embrace the idea of a class portfolio. Jack met with Jeff Davis, the endowment's chief investment officer, and pitched the idea. Jeff was open but cautious. After reviewing investment management programs at other universities, such as Wisconsin's ASAP and Texas's MBA Investment Fund, KU Endowment was on board.

That first fall semester in 1994 Kent, along with Jack and Paul, taught two sections of Applied Portfolio Management to a select group of 30 students. One class was held at the main Lawrence, Kansas, campus, and the other at the Kansas City Regent's Center. The semester started with the \$230,000 from Kent's gift in the fund. The students were divided into groups of four, and each group was allocated \$10,000 to invest. At the end of the first semester, the APM portfolio stood at almost \$275,000.

STUDENT COMMENTS FROM KENT'S EARLY CLASSES

Todd Preheim

APM Fall 1994

The APM class was very intense. I remember being very worried that Kent would call on me. When we talked about the cases, he would randomly call on people and pepper them with questions until the student could not answer one. I was always on edge and remember getting performance anxiety after Kent called on me to answer questions—even if the questions were elementary. I spent significantly more time preparing for the class versus others but still felt I never prepared enough.

My favorite case was International Speedway (ISCA). Guest speaker Steve Farley asked students how ISCA could increase sales in the coming years. A classmate answered they should not allow fans to bring their own coolers into the raceway. When determining what the additional revenue would be from this plan, another classmate suggested we model each fan will drink 10 beers.

Kent's teachings of aggressive event-driven strategies were way ahead of his time and are very prevalent today with many hedge funds. He challenged most claims of the buy-and-hold strategy and emphasized the importance of strong management. The case format along with Kent and his speakers' experiences allowed students to better understand how Wall Street works.

Paul Koch taught the class from inception with Kent until 2000. He was instrumental in laying the groundwork in the expectations of hard work and rigorous analysis in the class. Cathy Shenoy started teaching with Kent in 2001. By this time student groups were no longer allocated \$10,000 to

invest, but the idea of stock mentors guiding student decisions was starting to form. The switch away from active student management happened for several reasons. The first reason was poor decision making by students, especially early in the semester. The second reason was to encourage a longer-term mentality.

HOW DO BEGINNING INVESTORS THINK?

Let's examine what happens at the beginning of the semester. We'll focus on the poor decision making first and then get to what we hope is a cure for poor decision making. Several times Cathy starts the class by putting the two simple charts shown in Figure 1.2 on the board and asking students which stock they would prefer as an investment.

Almost universally, students pick Stock A with no hesitation. Cathy started putting up the charts after she noticed students coming to class saying "Why does the portfolio hold Stock X? It's a big loser." A lot of times the previous semester's class had picked Stock X. Students had selected the stock because they felt several things might happen in the future that would

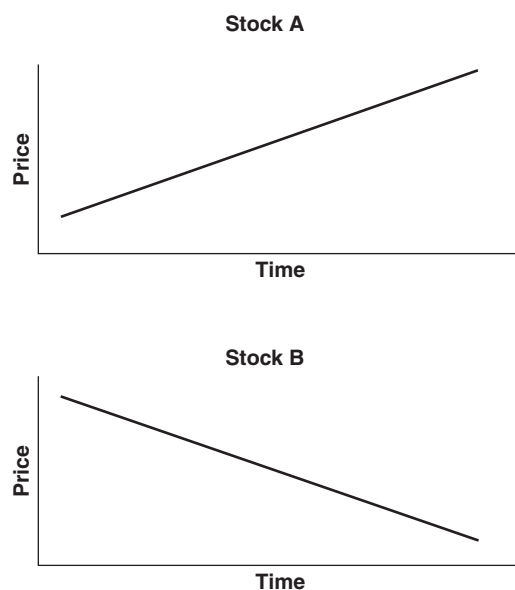


FIGURE 1.2 Where Would You Invest?

change its prospects. Selling now when it was down was exactly the wrong thing to do.

Psychologists have identified this type of behavior by investors, and call it the “recency effect.” Kent calls it “ruler analysis.” Generally, when people forecast stock prices, or anything else, it’s easiest for them to assume that the past will be like the future. However, in stock markets, individual stocks, economies, and lots of other areas, cycles and changes in directions are very common. Because so many people like to jump on the bandwagon and invest in stocks with rapidly increasing value, those stocks with recent price increases are more likely to be overvalued.

A big example of ruler analysis is the recognized trading strategy of momentum investing. Momentum investors are those who look at recent trends and ride those trends up or down, selling stocks with recent poor returns and buying ones with recent good returns. During the bubble of the late 1990s, momentum investors made a lot of money because there was an extended trend (bubble?) upward. During the shake out in 2001–2002, momentum investors lost a lot of money.

We find that new students in the APM class are especially prone to ruler analysis because they are afraid to trust their own judgment. A student once said, “Everyone else thinks that things are great. What do I know about anything?” The story of the Emperor’s New Clothes comes to mind. In a Danish fairytale, two con men sell an Emperor a new suit of clothes. They convince him that the suit is the latest and greatest, but emphasize that the most special property of the suit is that it is invisible to people who aren’t fit for their position. Of course, there is no suit, but no one wants to say they can’t see it. Finally, a child speaks up and asks why the Emperor isn’t wearing any clothes. Sometimes it just takes a few clear-thinking people to see through the hype of the Street’s new favorite stock.

“Buy high and sell low” happens when investors get stuck in a ruler analysis mode. People want to wait until others provide confirmation an investment is sound. By that time prices have gone up. They end up buying high—toward the end of Stock A’s price increase. John Bogle, the longtime chairman of the Vanguard Group, testified before Congress in 2004 about the phenomenon. He calls it a “timing and selection penalty.”¹

[S]hareholders have paid a heavy timing penalty, investing too little of their savings in equity funds when stocks represented good values during the 1980s and early 1990s. Then, enticed by the great bull

¹ Statement of John C. Bogle before the United States Senate Committee on Banking, Housing, and Urban Affairs, February 26, 2004.

market and the wiles of mutual fund marketers as the bull market neared its peak, they invested too much of their savings. Second, because they have paid a selection penalty, pouring money into “new economy” stocks and withdrawing it from “old economy” stocks during the bubble, at what proved to be precisely the wrong moment.

The result of these two penalties: While the stock market provided an annual return of 13% during the past 20 years, and the average equity fund earned an annual return of 10.3%, I estimate that the average fund investor earned just 3% per year. It may not surprise you to know that, compounded over two decades, the nearly 3% penalty of costs is huge. But the penalty of character is even larger—another 8 percentage points. \$1 compounded at 13% grows to \$11.50; at 10%, to \$7.10; and at 3%, to just \$1.80. A profit of just eighty cents!

It's not just mutual funds where people chase returns. It happens in all types of investing. Few people want to invest in a company that hasn't had good performance, especially if analysts or the media are not saying good things about it. So how does the APM portfolio avoid falling into this trap? The short answer is education. We educate students to think for themselves and do their own analysis. We also educate them in the “ways of Wall Street.” By “Wall Street,” we mean all of the participants in the investment industry. Some of the participants that influence investments and stock prices are mutual funds, investment banks, hedge funds, and private equity funds. Since these participants make up a large part of all the transactions in the market, understanding why and how each of these market participants makes money and their institutional incentives helps students unravel the mystery of stock prices. Another big influence on investment decisions is the financial media. The media, especially since the advent of CNBC, want to create a sense of crisis to keep viewers or readers tuned in to each tiny gyration in the market. How do they pick stories and stocks to follow? By understanding each participant's incentives, students can see when there may be some influence on prices outside of a stock's intrinsic value. In class we try to focus on making our own decisions about stock valuation and not being too influenced by temporary price aberrations caused by one of the market participants or the media.

We believe that a company's fundamentals eventually will be reflected in its price. Sometimes it takes longer than expected, but eventually a company's intrinsic value will align with its stock price. For this reason, education in two areas is important. First is education in the valuation techniques that many research analysts and portfolio managers use. The main valuation

methods that we use in class are discounted cash flow valuation and relative valuation. Both of these have lots of variations, but the core ideas in the two methods remain constant. The second area is education in what drives the decisions of the market participants. If students understand all of the different Wall Street participants and their incentives, then they will understand more objectively why some stocks linger in the dumps while others soar to mysterious new highs.

We discuss these ideas more in upcoming chapters, but here is a brief example of where and how mutual funds invest and how individual investors or a small portfolio like APM can find value where mutual funds cannot. A 2007 study by the Investment Company Institute estimated that investment companies managed about \$11 trillion in assets.² That's around 14 percent of the world's securities. In the United States there are at least 105 mutual funds with more than \$10 billion in assets and 35 with more than \$20 billion. That's at least \$1.5 trillion in assets right there! In funds that are so large, it is hard to move in and out of a stock quickly without affecting the price. It's not worthwhile for funds to own just a few thousand shares; usually they need to own a significant percentage of shares in a company. Funds have quarterly reporting dates. An unscrupulous fund may not want to report a loss on a position even when it doesn't like the long-run prospects. Right before the end of the quarter it might enter the market and buy a lot of shares to drive up the price of a stock. After the reporting date the fund will slowly unwind that position, and the price will come back down, as well. For those who have studied the company fundamentals, the situation represents an investment opportunity.

STUDENT GROUPS: SHORT-TERM INVESTING AND PORTFOLIO CONTESTS

For the first few years of the APM class, each student group received \$10,000 to invest at the beginning of the semester. The rest of the portfolio was managed by the class and called the core fund. The core fund held approximately 70 percent of the total assets. From 1994 to 1996 there were 25 student groups managing \$10,000 each. Table 1.1 shows that of the 25 groups, only 6 had a positive return, and only 1 group each year beat the core portfolio performance.

Table 1.2 shows the groups actual returns versus the core portfolio. A couple of groups did better than the core, but not enough to make up the difference in the poorly performing groups.

² 2007 *Investment Company Fact Book*, May 2007, <http://www.icifactbook.org/>

TABLE 1.1 Number of Groups with Positive and Negative Performance

Date	Negative Returns	Positive Returns	Total Groups	Groups beating Core
1994	8	1	9	1
1995	7	2	9	1
1996	4	3	7	1
Total	19	6	25	3

Why were the student group returns so dismal? We think there are a couple of reasons. First, many of the students were beginning investors, and they made many of the mistakes that novices make. The biggest mistake is the one that we mentioned earlier in this chapter: chasing returns instead of looking for good values. The other mistake that we made was in setting up a de facto competition among the groups. There is a logical strategy to follow in a competition: Bet a lot on a risky investment and hope it comes through. If it pays off you look like a genius, but the odds are low and many times the bets didn't pay off.

Every year there are a lot of sponsored investment competitions. Usually the rules are simple. Everyone starts with the same amount of money. The person with the most money at the end wins. The contest typically lasts three months, about the same as an academic semester. Winners in portfolio contests usually need to double their money in a few months to win. How do you double your money? You take a big bet in a few companies. To have the highest odds of success, pick just a few companies with the best chances of a big change. You want to look for a company that is waiting for drug approval, a big technology breakthrough, or some other impending event that will either make or break it. You have to be right on two counts: on

TABLE 1.2 Early Portfolio Returns: Groups and Core

Date	Average Negative Returns	Average Positive Returns	Group Average	Group with Highest Return	Core Fund Return
1994	−9%	15%	−10%	15%	18%
1995	−15%	9%	−10%	18%	16%
1996	−10%	12%	−7%	18%	14%
Total	−12%	12%	−9%		

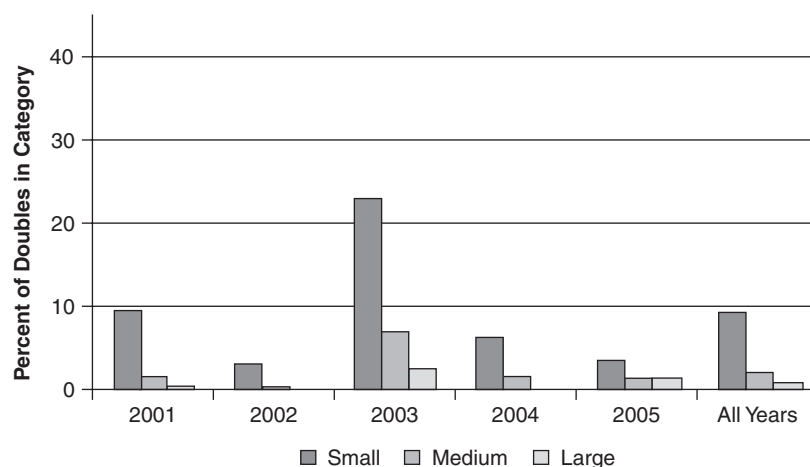


FIGURE 1.3 Percent of Stocks that Doubled or Better in Each Market Capitalization Category, 2001–2005

the timing of the event and that the outcome of the event was in the right direction. If you are wrong on either count, your returns will be flat in the best case. More likely, if you are wrong you lose a lot of money.

What's the chance of picking big winners? On average about 7 percent of all stocks double in value in one year, so just picking at random you have a chance to find a big winner. Figure 1.3 shows the percentage of stocks that doubled or better in each year over 2001 to 2005. If you pick from small companies with a market capitalization (market cap) of less than \$1 billion, your odds increase to just over 9 percent. Two percent of companies with a beginning market cap from \$1 to \$10 billion doubled and 10 (less than 1 percent) large-cap firms with market caps over \$10 billion doubled.

If you aren't going for a double, you still can do pretty well with returns of 50 percent or better. Figure 1.4 shows the percentage of companies earning an annual return of 50 percent or better for each market cap group. Overall, 17.6 percent of firms from 2001 to 2005 had at least one year with an annual increase of 50 percent or better. They may have decreased later, but a fairly large proportion of firms make significant moves every year, and every year there are more small-cap firms making the big move.

If you have some skill or knowledge, you may improve your chances even more. The 60th percentile is the level of return where 60 percent of stocks did worse and 40 percent did better. In Table 1.3 you can see that if you can perform in the 60th percentile over time, you will have a return that's well above average. There is still plenty of variability over the years, but by

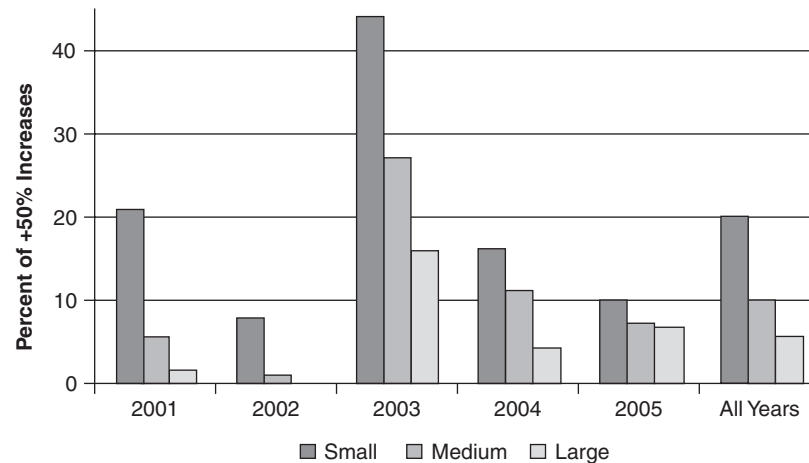


FIGURE 1.4 Percent of Stocks with an Increase of 50 Percent or More in Each Market Capitalization Category, 2001–2005

eliminating the bottom 60 percent, your return is significantly improved. In most years, it is still the small stocks that are the best performers. In all years, the small- and medium-cap firms do better than the large-cap ones.

Some of the student groups turned out to be right in the long run but missed the timing that the semester constraints put on them. For example, Jeff Brueggemann and Greg Baugh from Group 1 in 1994 invested in Duracell at \$45.75. By the end of the semester, when they sold, the price was \$45. A year later the price was \$53. If we had held to the next year, including the generous dividends that were paid, we would have earned a 40 percent return.

TABLE 1.3 60th Percentile Returns by Market Capitalization, 2001–2005

	2001	2002	2003	2004	2005	All Years
Large cap (>\$10B)	−7.8	−14.5	29.9	13.9	7.9	7.6
Medium cap (\$1–10B)	2.1	−5.4	38.7	19.8	9.6	13.9
Small cap (<\$1B)	15.5	−0.8	56.3	16.0	3.3	16.7
All firms	11.4	−2.2	50.7	17.0	5.1	15.4
Median return	−4.6	−13.7	30.9	13.9	4.1	6.4
Total firms	7,112	6,704	6,388	6,228	6,228	32,660

As we said earlier, an investor has to be right on two counts: on the timing of the event and the outcome has to be in the right direction. But probably the biggest obstacle to better returns was and is the difficulty of tuning out conventional wisdom and getting close to the information.

GETTING CLOSE TO THE INFORMATION

Jack Gaumnitz feels that Kent's biggest contribution to the students is his ability to dig into a company and get close to the information. What Jack means by "get close" is understanding what drives a company's business. Wall Street is fixated on earnings per share (EPS) numbers. Research analysts' forecasts of EPS are trumpeted everywhere. Just watch CNBC for a few minutes during earnings season. The buzz is all about whether the company made its earnings numbers, that is, did EPS match analyst forecasts of EPS? If the company comes in at forecasted EPS, then the stock price usually stays the same. A miss, when actual EPS is below forecast, usually means a stock price drop; and when actual EPS comes in higher than expected, the stock price usually is higher.

Getting close to the information is looking at all the pieces that go into the EPS number and understanding what the most important component is. In later chapters we have some extended examples, but here are a couple of simple illustrations of this idea. In the late 1990s wireless companies were starting to take off. Companies were signing up loads of new subscribers. Many of them weren't profitable yet, but revenue growth was spectacular and stock prices were soaring. A closer look at the numbers revealed that ARPU—average revenues per user—were declining significantly. At the same time, costs to sign up users were also increasing. Some companies actually were losing money for every customer they signed up. For some of these companies, EPS was increasing because they were selling other assets or had one-time income unrelated to their wireless businesses. Of course, those gains were not sustainable. When the wireless businesses had to stand on their own, it became clear that the competition to sign up customers had driven the ARPUs down. Since then we have seen a lot of consolidation in the industry with just a few economically viable companies emerging.

Before the wealth of information was available on the Internet, Kent would bring piles of documents to class: analyst reports, annual reports, and industry information. He would also make arrangements for the students to listen to companies earnings conference calls. He would bring in speakers who were key players in the industry. All of these information sources were hard for an individual investor to access in the mid-1990s. Access to analyst reports was limited to portfolio managers; individuals with sizable accounts

could get some reports from their broker. Many times those reports were limited to the broker's own firm. Access to earnings conference calls was even more limited. Top analysts and a few others in privileged positions were invited to participate. It was rare indeed for students in a class to be listening to a CEO explain corporate strategy and expectations for the next year. Nevertheless, students had to examine the statements and decide on the CEO's credibility.

One of the biggest changes in investing is access to information. Today all corporate filings are available electronically at the Web site of the Securities and Exchange Commission (SEC). Every company is required to have a Web site with the same information available. In October 2000 Regulation Fair Disclosure, called Reg FD, became effective. Reg FD prohibits companies from making disclosures to selected individuals. If a company wants to report some information, it must make it available to everyone. Earnings calls have to be announced in advance with access provided to anyone who wants to listen. The SEC's idea was to provide a level playing field for all investors.

Regulation FD and the explosion of information available on the Internet provide students and individual investors mountains of information not generally available in the 1990s. Are we all better investors because of the wealth of information? Maybe not. Now that we have a lot more information, the task is to organize, synthesize, and recognize what is going to drive the stock price; what is fundamental to a company's success, and how is the street interpreting the same information. It is the same task that successful investors always had, but now there is more chaff to sift out to get to the grain. (Sorry about the Kansas analogy.)

A big part of the APM class now is learning to sift through the mountain of information available to get to the pertinent information quickly. When students first enter the class, many rely heavily on finance.yahoo.com or moneycentral.msn.com. Both of these Web sites, and many others, provide lots of information about stocks. The sites provide stock quotes, a multitude of financial ratios, financial statements, historical prices, estimated earnings, business summaries, ownership information, analyst ratings, news, charts, competitors, message boards, and even more. We look at the APM portfolio everyday on finance.yahoo.com. We can scan the news releases and find quotes on foreign stocks that other sites don't have.

It seems to be a one-stop shop for all you would ever need to know about a company. What else would anyone need? How much closer to the information can you get? These financial summary sites are great at providing a fairly in-depth summary of lots of information quickly. You can keep up to date on all the news about a company and find out when earnings calls will be and how to participate. The sites provide a financial and market

snapshot of where things stand right now. What you cannot find is how a company arrived at its current state and what its prospects for change are. How many lines of business does a company have, and how are they doing? The profile lists all lines of business or products but gives no qualitative or quantitative information on the relative or strategic importance of any product or business line. Figuring out an investment catalyst is one of the most important jobs for students or any investor. Here the financial summary sites are of little value. They do not interpret the information for investors.

LSB Industries is a longtime holding in the APM portfolio. Currently it manufactures chemicals in one division and HVAC (heating, ventilation, and air conditioning products) in another division. In Chapter 6 we outline how each of these segments has provided different strategic opportunities and challenges to the company. It is not possible to understand LSB as a long-term investment without understanding its business segments separately and how they interact. Figure 1.5 shows LSB Industries' income statement from finance.yahoo.com. This summary provides no clues about whether each of the businesses is performing well, nor does it give the kind of financial information that would indicate good or bad performance. To find that level of detail you need to go directly to the source of the information, the financial filings with the SEC.

10-Ks are the annual financial statements that must be filed with the SEC by every U.S. company listed on a stock exchange in the United States. 10-Qs are quarterly statements. The notes that accompany the financial statements are required parts of 10-Ks and 10-Qs. The notes explain how a company reports items in the financial statements or provide more details about certain items. Companies must provide financial information for their significant business segments in the notes section. The footnotes to the financial statements generally report three types of information: what accounting method a company uses when there is a choice, detailed information about some items, and other required disclosures. If the ability to pay interest on bonds is of particular interest, the footnotes contain details about scheduled bond payments.

The management discussion section provides a narrative of more qualitative information about segments. Every 10-Q and 10-K must report four parts:

1. Financial statements including notes
2. Management's discussion and analysis of financial condition and results of operations (called MD&A)
3. Quantitative and qualitative disclosures about market risk
4. Controls and procedures

LSB Industries Inc. (LXU)		On Jul 21: 8.42 0.00 (0.00%)		
MORE ON LXU Quotes Summary Real-Time ECN Options Historical Prices Charts Basic Chart Technical Analysis News & Info Headlines Company Events Message Board Company Profile Key Statistics SEC Filings Competitors Industry Components Analyst Coverage Analyst Opinion Analyst Estimates Research Reports Star Analysts Ownership Major Holders Insider Transactions Insider Roster Financials Income Statement Balance Sheet Cash Flow		<p>Make investing easier with MarketWatch.com.</p> <ul style="list-style-type: none"> Visit now to find out why! MarketWatch.com 		
Income Statement		Get Income Statement for: <input type="text"/> GO		
View: Annual Data Quarterly Data		All numbers in thousands		
PERIOD ENDING	31-Dec-05	31-Dec-04	31-Dec-03	
Total Revenue	396,722	363,608	317,263	
Cost of Revenue	330,651	310,497	267,831	
Gross Profit	66,071	53,111	49,432	
Operating Expenses				
Research Development	-	-	-	
Selling General and Administrative	53,456	50,541	41,745	
Non Recurring	(2,350)	-	-	
Others	-	-	-	
Total Operating Expenses	-	-	-	
Operating Income or Loss	14,965	2,570	7,687	
Income from Continuing Operations				
Total Other Income/Expenses Net	1,561	6,061	983	
Earnings Before Interest And Taxes	16,526	8,631	8,670	
Interest Expense	11,407	7,393	5,559	
Income Before Tax	5,119	1,238	3,111	
Income Tax Expense	118	-	-	
Minority Interest	-	-	-	
Net Income From Continuing Ops	5,746	1,906	3,111	
Non-recurring Events				
Discontinued Operations	(644)	-	-	
Extraordinary Items	-	-	-	
Effect Of Accounting Changes	-	(536)	-	
Other Items	-	-	-	
Net Income	5,102	1,370	3,111	
Preferred Stock And Other Adjustments	(2,283)	(2,322)	(2,327)	
Net Income Applicable to Common Shares	\$2,819	(\$952)	\$784	

FIGURE 1.5 LSB Financial Statements from Finance.Yahoo.com

10-Ks have additional discussion requirements, but each of the four is always in both 10-Ks and 10-Qs. Unless students dig into the filings, they would miss a basic understanding of how LSB operates. Note that Figure 1.5 contains a link to the SEC filings.³

³ Foreign companies listed on U.S. exchanges may elect to file an annual 20-F instead of a 10-K. Companies that file 20-Fs usually do not file 10-Qs, although they may still report quarterly information on their own Web site or in some other unofficial format.

ONIONS, POKER, AND ANTS

When students get close to the information and understand what the investment thesis is and what drives a company's operating results, the next step is to step back and see how things unfold. Kent uses two different analogies to describe that process: peeling onions and playing poker. When you carefully peel the skin off an onion, another layer is revealed beneath the skin. You can take off more and more layers to reveal what's beneath. New press releases and earnings statements are like peeling the layers off an onion. With each new piece of information, a new layer of the onion is revealed.

The poker analogy is similar. When you play five-card stud, some cards are revealed to the whole table. As the dealer reveals more and more cards, you have a better idea of where all the cards lie. Again, once you understand the investment thesis, each month will bring new evidence to support or refute that hypothesis. If you understand the company's business and critical issues, the new information is more valuable and more informative.

In 2001 we invested in Sohu, one of the first publicly traded Chinese Internet companies. The investment thesis was that the Chinese economy was developing rapidly and that increased spending by the Chinese consumer would not be far behind. As the middle class developed in China, Internet usage exploded. At the time most of the news stories about Sohu and other Chinese companies focused on the risk of investing in China or the poor financial reporting practices in China. Never mind that Sohu traded on the NASDAQ and had to follow U.S. reporting requirements and was audited by U.S. firm accounting firm PricewaterhouseCoopers. Once we had made a decision to invest in China, the Chinese Internet sector, and Sohu, that type of news story was irrelevant. What was relevant were operating results. When quarterly statements and conference calls were available, we wanted to see rapidly increasing numbers of users and increasing gross margins. We did see those things, but the market did not react to them for quite a while. Table 1.4 shows Sohu's year-end stock price, cash per share, and annual stock return. It also shows the revenue growth rates for the two main segments of Sohu's business, advertising and wireless.

Sohu started trading on the NASDAQ on July 12, 2000, at \$13. By year-end it was down to \$2.38, an 82 percent drop in price. Sohu did have negative earnings but positive cash flow. Advertising revenues and users were growing rapidly. The table shows that reported revenues were up over 200 percent. The fundamentals looked as if they were going according to plan with the APM investment thesis. However, those numbers were not good enough for the market in 2000. Sohu introduced advanced wireless services in 2000, and both advertising and wireless revenue segments were up 58 percent and 3,345 percent, respectively. Still, the stock price was down

TABLE 1.4 Sohu Stock Return and Sohu's Growth in Business Segments

Date	Year-End Stock Price	Cash Per Share	Annual Return on Stock %	Advertising Revenue Growth %	Wireless Revenue Growth %
1998	—	—	—	505	—
1999	—	—	—	243	—
2000	2.38	2.12	—	261	—
2001	1.20	0.82	−50	58	3,345
2002	6.40	0.62	433	50	1,153
2003	29.91	3.56	367	113	364
2004	17.71	3.47	−41	89	−23
2005	18.34	3.49	4	27	−28

50 percent from the previous year-end price. The stock closed at an all-time low of \$0.60 on April 9, 2001. The APM portfolio was buying all during this time. Little news—good, bad, or indifferent—was reported about Sohu. Even when the company reported great numbers, nothing happened with the stock. No one was paying attention.

In 2001 there were some generally negative stories about investing in China. Conventional wisdom about investing there was negative. Big economic changes had been taking place for the past 10 years, but lots of stories in the United States said that investing in China was too risky. The comments ran like this: It was a communist country; they could change the rules; and you would lose your money at any time. Kent challenged that type of negative thinking. Through his guidance, the APM fund has had a significant portion of the portfolio invested in China since 2000.

By 2002 and 2003 the rest of the world started to pay attention, as you can see from Sohu's stock price increase. In the third quarter of 2002 Sohu achieved positive earnings. Still, it took until mid-April 2003 until the price was over its \$13 initial public offering level, almost two years. Little about the fundamentals had changed, the investment thesis held, but it took the rest of the market a few years to catch up to the fundamentals. Every quarter an onion layer was peeled away, a new poker card was shown.

WHAT ABOUT THE ANTS?

Another side of getting close to the information is sorting through ants on elephants. The financial press reports just about everything that happens to

public companies, but it is especially interested in bad news. All company news releases are filed with the SEC as 8-K filings. There is so much corporate news that it's hard to filter out what will affect fundamental value from news that is just a part of doing business. The doing-business news is something that happens in the due course of running a business. You should expect some negative things to happen to a company, and you should expect that good management knows how to deal with the situation. That's their job. Plants get shut down because of accidents or natural disasters. In our litigious society, lawsuits are filed all the time.

Beginning students pay a lot of attention to current news reports and not enough attention to how the news affects the investment thesis. It's not uncommon for a student to say that we need to get out of a company because a lawsuit has been filed. It's bad news, and the stock price has dropped. Most lawsuits are part of doing business. Usually they do not affect the overall fundamental value of the company. Sometimes the more sensational the story, the less it will affect the value of the company. Fingers in food or hot coffee aren't going to bankrupt a large restaurant chain, but they certainly grab the headlines. Focusing on the small stuff is the ant on the elephant. The elephant does not even know the ant is there. Getting close to the information is learning to recognize the ants and the elephants.

Another example is that one line of business is not working out and the company has decided to drop it. Many times that line of business is a very small percentage of the overall company, and it has been losing money. It's actually good news that the drag on earnings is going to be relieved, but the news isn't pitched that way, and students may pick this up as bad news.

THINGS TO COME

We discussed a lot of ideas in this chapter. In the rest of the book we expand on these ideas and provide some detailed examples to illustrate these ideas more carefully. We seemed to dwell on mistakes that beginning APM students typically make, but it is important to recognize mistakes so we can become more astute investors. Fortunately, by the end of the class, most students recognize their mistakes and have a handle on the analytical tools to help them succeed.

The returns on the APM portfolio since inception have been exceptional, especially compared to the market. Since inception through mid-2006 our cumulative return is 1,568 percent compared to 235 percent for NASDAQ. That's a compound annual return of 23 percent for APM versus 9.3 percent for NASDAQ. The alpha or "excess" risk-adjusted return is almost

16 percent (refer to Figure 1.1). In Chapter 5 we'll delve deeply into the numbers.

The goal of the APM class is to provide a hands-on investment education and make money at the same time. We think that we have hit on the right balance of oversight and education that makes a long-run successful portfolio and investor.