



THE BUSINESS OF TECHNOLOGY

Given up for dead, traditional valuation techniques will make a comeback in 2002

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by staff

Valuation. To some, it must seem an exotic word, eliciting a vague idea of some far-off place. To others, it's something they once knew that's now just a hazy memory. The lack of interest is hardly surprising. In 1999 and

Why should that change in 2002? Because, despite a shocking downward adjustment of sales and earnings expectations--particularly for technology companies--those expectations are coming into clearer focus. Investors, meanwhile, have finally given up both buying and selling indiscriminately, and are rediscovering that valuation is a valuable part of stock selection.

Of course, there are no absolutes. Pip Coburn, UBS Warburg technology strategist, tells us that "fundamentals condition the valuations we're willing to pay." He means that in good times we tend to overpay, and in bad times we underpay. Others are more direct. "Don't pay attention to multiples--it's all make-believe stuff," says Bob Bacarella, president and founder of the Monetta family of mutual funds. "P/Es are meaningless because valuations are based on changing expectations."

We wouldn't go that far, but he's right that valuation in and of itself is quite useless. Just because a stock looks cheap relative to the past, for example, doesn't mean it won't stay that way. That said, all stocks tend to trade within valuation ranges over time, and when a stock approaches either limit of that range, it can present opportunities to buy or sell. "Valuation can tell investors whether prices are in the right ballpark to set a low or a high," says Steven Milunovich, Merrill Lynch global technology strategist.

Contrary to what some in punditry circles would have you believe, technology stocks aren't grossly expensive today. Yes, by some measures, they're still high enough to cause vertigo. Price/earnings ratios are near their highs of the last decade. By others, though, they're low enough to be worth serious consideration. On the basis of enterprise value to EBITDA (earnings before interest, taxes, depreciation, and amortization), technology stocks are near their historical average.

The mixed message sent by different valuation measures is proof positive that any valuation--no matter how sure we are of its accuracy--is only a starting point. Says Arnold Berman, technology strategist at the Sound View Technology Group: "Valuation

is crucial. So, too, are an assessment of product cycles, demand and supply fundamentals, management aptitude, investor psychology and expectation levels." It's crucial, too, to remember that investors will treat the same stock differently at different points in a company's life cycle.

In short, it's vital to understand where stocks are trading, and, hopefully, why. Only through an awareness of issues like earnings estimates and growth forecasts--the building blocks of valuation--can an investor come close to that understanding. In this article, we offer a review of the valuation concepts most relevant to technology investing, as well as ten stocks that look appealing by one or more of those measures .

In the 130-year history of U.S. stock markets, price divided by earnings has been the one constant valuation ratio used (or misused) by investors. The ratio, which represents how much investors are willing to pay per dollar of reported earnings, gets more ink than any other tool. That's reason enough to pay attention: if everyone else is using it, it becomes a market-moving metric.

Some investors rely on a company's historic, or trailing, P/E ratio--obtained by dividing a company's stock price by its last four quarters of earnings per share. But most prefer to focus on companies' prospects, using forward 12-month or next-calendar-year earnings. "Market forces move so fast we have to look ahead, as opposed to behind," says Lenny Schuster, a hedge fund manager with Gemina Capital.

The ratio can be problematic. Technology is more volatile than any other sector, and therefore the range of P/Es varies enormously from month to month. The P/E of the storage industry, for example, stood at 27 at the end of September, but shot up to 50 by the end of October, according to Merrill Lynch. The P/E of technology as a whole has ranged from 20 to 44.2 over the past decade.

This past year held additional difficulties. Due to the economic turmoil, earnings estimates became as volatile as stock prices. The E in P/E was continually revised downward, so far in fact that P/Es have stayed high--at last look, technology stocks traded for 42.8 times 2002 earnings, hardly a bargain when the S&P 500 trades for just 22.5 times earnings. As businesses finally begin to stabilize after a tough year, however, there's greater clarity to earnings outlooks, bringing more growth-oriented investors back to P/E. "For the first time in months, we're using earnings in our models," says Ken Pearlman, director of research at Firsthand Funds.

Our first stock that's attractive on a P/E basis has a simple story: it's a market leader, has a major product upgrade about to hit the stands, and a P/E ratio of just 17. Autodesk, a maker of high-end computer-aided design (CAD) software, has dominated the CAD market with its flagship AutoCAD product for as long as anyone can remember. AutoCAD 2002 is due this winter, and the company has been gaining share in new markets like manufacturing, geographic information systems, and gaming. Weakness in Asian markets, which account for 25 percent of sales, has caused investors to shun Autodesk stock of late--historically, its P/E on forward earnings has been 23.9. But a

strong balance sheet that includes no debt and \$7 a share in cash should allow it to weather the current difficulties and bounce back in 2002.

Why Computer Associates (CA) trades at a discount to the business software industry needs no explanation. Management has a history of getting press for the wrong reasons, the company has often seemed an experiment in the flexibility of financial accounting, and, to top it all off, revenue and earnings went into atrophy last year. At \$31.77, its P/E of 12.9 on estimated 2002 earnings is well below the software industry's average of 39.4. The good news: in 2002, CA should benefit from an upgrade to its core product--the systems-management software Unicenter--and strength in the company's security and storage software offerings is impressive. "The balance sheet isn't pretty, but it's getting a lot better," says CIBC analyst Melissa Eisenstat. CA's operating margins, she also points out, were 18 percent last March, but are around 30 percent now, among the industry's best.

With Internet security software currently one of the market's hot spots, the stock of Symantec, our final pick on a P/E basis, has soared 88 percent since late September. But at a recent price of \$65.12, Symantec trades for just 23.5 times calendar 2002 earnings estimates, well below the ratios for competitors Check Point Software Technologies and Internet Security Systems, with PEGs of 30.5 and 73.4, respectively. The company's retail business, which accounts for 40 percent of sales and is anchored by its Norton Antivirus software, should remain strong, due to high-profile virus attacks. On the enterprise front, Symantec is moving toward its goal of being a comprehensive provider of network security solutions. Brian Barish, portfolio manager of the Cambiar Opportunity Fund, says the stock has further to run because an acquisitive management (Symantec has bought 23 companies since its 1989 IPO) will likely continue along that path after completing a \$525 million convertible bond offering in October.

Price/Earnings/Growth RATIO (PEG)When technology hit the mainstream in the '90s, most investors had never seen entire industries growing as fast as Silicon Valley's startups. In an attempt to account for that growth, analysts developed the PEG ratio, calculated by dividing the P/E by expected long-term earnings growth. The logic goes like this: given two companies with similar earnings, wouldn't you pay more for the one with higher projected earnings growth?

PEG ratios have historically hovered in a fairly narrow range (see "Price/Earnings/Growth," above). Technology as a whole has traded at PEG ratios between 0.71 and 1.47 over the past decade. (At the height of the bubble, some individual PEGs were as high as 2.5.) Analysts that cover companies with particularly high earnings growth rates use the PEG more than those who cover slower-growing ones. "You simply have to account for that growth in your valuation," says Keith Bachman, an analyst at ABN AMRO Bank. "Those who don't," he adds, "should."

As with P/E ratios, PEG-based analysis entails the use of guesses. Unlike a P/E ratio, however, a PEG ratio is based on two guesses, not just one. Analysts are notoriously poor at forecasting short-term earnings--according to UBS Warburg, 62 percent of full-year

earnings estimates made in January 2000 missed their marks by more than 20 percent. In light of that, it's unwise to accept projected long-term growth that exceeds a company's historical performance. "If the only way you can justify a price is by assuming faster growth, I'll pass," says Jason Voss, portfolio manager of the Davis Appreciation & Income Fund.

Amdocs, with \$1.4 billion in sales, provides customer billing and management software and services for telecommunications companies, a function that's growing in importance as carriers struggle to reduce customer churn. While its P/E of 22.3 is attractive in its own right, Amdocs's PEG of 0.8 is impressive in a high-margin business like software. According to Peter Giglio, an analyst at the investment bank Gerard Klauer Mattison, the reason can be summed up in one word: telecom. And though it's true that investors are afraid of telecommunications as a whole right now, Amdocs is projected to enjoy earnings growth of 30 percent over the next several years. The stock is also cheaper than that of competitors Convergys and EDS, with PEGs of 1.0 and 1.6, respectively.

Another prospect highlighted by its PEG ratio is Nyfix, a maker of electronic trading products that provide order management and routing systems to institutional investors. Fifty-seven percent of NYSE member firms use Nyfix systems to manage their trading of listed equities. The company is on track to post its third consecutive year of 90 percent-plus year-over-year sales growth and is expected to turn in 240 percent earnings growth in 2002. Despite that, its 2002 P/E stands at 18.5, and the company's PEG ratio is just 0.5, a significant discount to the 1.1 of its peers. Nyfix got caught between product cycles earlier in 2001, and investors remain concerned about the rollout of its new trading system, dubbed Millennium, says Justin Hughes, an analyst with Robertson Stephens. But core clients like Lehman Brothers and Merrill Lynch have decided to adopt the product; Mr. Hughes thinks the current stock price ascribes no value at all to the initiative.

For a final PEG story, consider SpectraLink, a company that sells wireless phone systems to venues like hospitals, schools, and campus environments. At \$17.04 a share, many investors would be turned off by SpectraLink's relatively high 2002 P/E of 29.5, especially for a company with only \$62 million in revenue. Stop at the P/E, though, and you're missing expected long-term earnings growth of 37 percent. With growth factored in, SpectraLink trades at an attractive PEG of 0.8. In addition, Ed Snyder, an analyst at J.P. Morgan Chase, says SpectraLink has managed its balance sheet and customer base better than its competitors, which include Intersil, Proxim, and Symbol Technologies. The average PEG of that competitive set is 2.4, triple that of SpectraLink.

PRICE/SALES RATIO (P/S) Price/sales is the simplest of the valuation approaches: take the market capitalization of a company and divide it by sales over the past 12 months. No estimates are involved. The lower the ratio, the better. The best alternative when evaluating young companies that have no earnings, it's also useful in evaluating mature companies.

The ratio is suited to today's market because of a lack of consistent earnings presentation, especially from technology companies. "Earnings aren't just earnings anymore--they're pro forma earnings with one-time charges, stock buybacks, you name it," says Kim Scott, fund manager of the Waddell & Reed Advisors New Concepts Fund. Price/sales allows investors to focus on real-world sales, not accounting black magic.

As with all valuation techniques, though, it's just the start. "The worst thing you can do is to buy stocks without looking at underlying fundamentals--low price/sales ratios are a classic value trap," says Dave Powers, a senior technology analyst at Edward Jones. What's more, just as investors tend to be willing to pay more for faster-growing earnings (thus, the PEG ratio), they will also pay more for some companies' sales than for others'. If an industry is more profitable than others--software's margins are superior to most other technology companies', for example--investors will put a premium on those sales. At current prices, software companies trade for 6.2 times trailing sales, vs. just 3.9 times for communications equipment.

Our first stock that's attractive on a price/sales basis comes from the relatively mature electronic manufacturing services (EMS) sector. Celestica, a maker of workstations and other hardware for customers like EMC, IBM, and Sun Microsystems, may be the best managed in a competitive industry that includes Flextronics, Jabil Circuit, and Solectron. Celestica's revenue per employee--a key metric in manufacturing--is \$339,000, nearly double that of any other EMS player. At \$41.52 a share, Celestica's price/sales ratio of 0.83 isn't the lowest in the industry--Solectron's is a sporty 0.5--but it's the only prominent EMS company expected to post an earnings increase in 2002.

Scientific-Atlanta--a maker of digital set-top boxes--is situated to ride the video-on-demand wave coming in 2002, the cable industry's version of a la carte on your couch. While sales of set-top boxes have slowed from their hypergrowth phase, cable operators are still itching to provide high-margin products to subscribers, and at a price/sales ratio of 1.9, this stock is still a good bet. Scientific-Atlanta recently announced that it would develop and support AOL TV services, like instant messaging, for cable operators. The company continues to make strategic acquisitions, like its November purchase of BarcoNet, a maker of digital transmission equipment. Chris McHugh, a senior portfolio manager with Turner Investments, says the lack of strong competition bodes well for the company: its main competitor, General Instruments, has a projected growth rate half that of Scientific-Atlanta.

ENTERPRISE VALUE/EBITDA RATIO (EV/EBITDA)Our fourth--and least-known--valuation method is the ratio of enterprise value to EBITDA. At its root, the ratio is a reminder that when buying shares, an investor is actually buying a piece of a company. Whereas P/E uses equity market capitalization (as represented by share price) and ignores all other forms of financing, enterprise value--market capitalization plus debt minus cash--gives an indication of how much it would actually cost to buy the entire company. EBITDA--the money a company earns by making and selling its products, before all that other rigmarole--is a gauge of a company's cash-generating capability.

Employ EV/EBITDA, then, and you're getting a look at how much it would cost to buy the whole shebang, and how much money that investment would throw off yearly. Of course, the ratio is not just for would-be takeover artists a la Gordon Gekko. It's a good adjunct to P/E-based analysis.

In practice, the ratio should be used when comparing companies of similar capital intensity, or spending habits. For example, an intellectual property company like Rambus, with very little overhead, shouldn't be compared with Intel, which owns its own chip fabs, on the basis of EV/EBITDA.

Like P/S, it's useful when analyzing companies that lack positive earnings, particularly those with high capital expenditures. "If there are earnings, use the P/E ratio," argues T.C. Robillard, an analyst at Salomon Smith Barney. "But when there are no earnings, you have to get at their value somehow." Capital-intensive industries that are naturals for EV/EBITDA are cable and media, telecom, and even some communications-equipment companies. Right now, tech is valued at 16 times its EBITDA, a shade above its historical average.

Although communications-equipment companies are not exactly in favor right now, Cable Design Technologies (CDT) is one exceptionally affordable stock. For this maker of high-bandwidth network connectivity products, the high costs of capital associated with its business make an EV/EBITDA valuation appropriate. With a P/E of 24.7 and a PEG of 1.5, investors could easily miss CDT upon a cursory glance. But with an EV/EBITDA ratio of just 5.2, well below its own five-year average of 9.6, CDT is a bargain. Jeffrey Beach, an analyst at the full-service brokerage Tucker Anthony, points out that CDT is improving its margins and experiencing an increase in demand for cabling for security and video conferencing in the face of terrorist threats.

The wireless tower business is also the kind of cash flow-oriented business for which EV/EBITDA is appropriate. Companies buy land on which to build towers, then rent the space to wireless carriers. The high costs of purchasing the land and erecting the towers leave many unprofitable on a net income basis, but they're cash-generating machines. The most attractive tower stock is SBA Communications, largely because of a decision to manage its cash flow and focus on profitability rather than expansion. With an EV/EBITDA ratio of 11.8, SBA is trading below its peer group average of 12.6. Deutsche Banc Alex. Brown analyst Douglas Mitchelson calls SBA "the best operator in the tower industry."

It's inarguable that an understanding of valuation is crucial to long-term investing success. If you don't believe us, ask Warren Buffett. But it's only one component of stock picking. "Couple it with an education in the industry, the management team, the consumers, and the market, though, and you'll be able to make better investment decisions," says Betty Wu, a former Wall Street analyst and admitted valuation zealot. We like the sounds of that lesson.