SCREENING FOR STOCKS USING THE DIVIDEND-ADJUSTED PEG RATIO

By Kenneth J. Michal

As today's market sentiment shifts and investors begin to question the fundamentals of many growth stocks, the principles of value investing are being embraced once again, providing an opportune time to visit the investment approach of value investor and noted contrarian, John Neff.

Growth stocks, including hot-to-the-touch Internet firms, helped fuel the stampeding bull market that charged through the 1990s. The majority of these dot-com stocks—still rampaging today—possess sky-high price-earnings ratios, post zero or negative earnings, and yet support towering stock prices based only on future potential growth prospects.

These prices are built up by investors following a herd mentality—investing in such companies simply because others are doing so. Too many fashion-conscious investors ignore the fundamentals and concentrate on a stock or an industry's "coolness" rating. These followers add dot-com stocks to their portfolios because they are trendy and the hot topic; Internet stocks simply make one's portfolio look more glamorous. But over time, tastes change and fads fade. Equally, the markets adjust and bad investments become hideous reminders of poor judgment, looking as square as that polyester leisure suit hanging in the back of your upstairs closet.

As today's market sentiment continues to shift and investors begin to question the fundamentals of many growth stocks, the principles of value investing are being embraced once again, and contrarian thinking appears to be returning to investor consciousness—an opportune time to visit the investment approach of value investor and noted contrarian, John Neff.

AN OUT-OF-FAVOR APPROACH

While serving as portfolio manager of the Vanguard Windsor Fund from 1964 until his retirement in 1995, Neff employed a value investing approach using a stringent contrarian viewpoint. Neff perennially found undervalued, out-of-favor stocks in the bargain basement. He liked stocks with a combination of low price-earnings ratios, solid growth forecasts in earnings and sales growth, and an increasing dividend yield. Neff searched for stocks that were unattractive, and in his words, matched the fund's "cheapo" profile.

During his 30-plus years at the helm of the fund, Neff delivered an annual average return that exceeded the rate of return of the S&P 500 by more than 3%. The fund did have its down years, however, and today, value investing has become an out-of-favor approach. Neff said his own contrarian nature told him that there was no better time to write a book on value investing than when it seemed out of favor.

Neff's book, entitled "John Neff on Investing" (John Wiley & Sons, Inc., $27.95) discusses these value investing principles. His book served as the primary source for this stock screening article.

SOBER REFLECTION

Neff believes that value investing demands a clear-thinking, objective view of the market—what he refers to as sober reflection. Neff also believes that judgment and fortitude are prerequisites for investment success. He says that judgment singles out good investment opportunities and that fortitude helps you live with brief downturns while the rest of the world jumps ship. He

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believes that successful investing requires lots of perseverance, which requires an investor to hang in there when the prevailing opinion says you are wrong.

This idea of sober reflection and of holding true to your beliefs is what is lacking in today's Internet stock-crazed marketplace. Too many investors are drunk on the flavor of the moment, according to Neff, chasing hot stocks to the moon in ever-rising markets of ignorance and wonderland.

BULBS, BOOMS AND BUSTS

Investors have been falling prey to similar traps as far back as 17th century Holland and the frenzy over tulip bulbs.

Neff points to two more recent stock fads that mirror today's Internet hypnotism trick—the "tronics" boom and the Nifty Fifty.

In the 1950s, electronics was the hot spot in the market. Sparked by the launch of the Russian spacecraft Sputnik, the electronics industry itself shot into outer space. Just as today, when more and more public companies are changing their names to include ".com," several firms in the 1950s added the word "electronics" or a "tronics" suffix to their name in an attempt to capture some of the action.

Similarly, during the early 1970s, the Nifty Fifty stocks were all the rage. Mostly household names, the Nifty Fifty was comprised of super-growth candidates with future prospects that were viewed so favorably that investor demand began to exceed supply, and investors assumed prices would go up forever. As many more investors piled into the mix, demand eventually slowed, prices eased and the aura quickly wore off.

In both instances, prices skyrocketed based upon the buzz surrounding the stocks and not because of solid fundamental prospects. Both groups were high-flyers for sustained periods of time—three years for the Nifty Fifty—but eventually investors in both cases suffered crash and burn scars.

THE DIVIDEND-ADJUSTED PEG

With value investing, there are a number of ways to go about screening for attractively-priced stocks. One way is via a combination of criteria that includes a low price-earnings ratio and a strong dividend yield with support from solid estimated earnings and sales growth. Another method is to employ the hybrid multiple called the dividend-adjusted price-earnings relative to growth (PEG) ratio. With this second method, solid earnings growth and sales growth forecasts are again needed.

The dividend-adjusted PEG ratio serves as the foundation of the Neff stock screen presented here, which was created using AAII's fundamental stock screening software program *Stock Investor Pro*.

The standard PEG ratio adjusted to reflect the dividend yield is referred to as the dividend-adjusted PEG ratio. It is calculated by dividing the price-earnings ratio by the sum of the estimated earnings growth rate and the dividend yield. The dividend-adjusted PEG ratio encompasses each of the key components of Neff's value investing style—the price-earnings ratio, earnings growth estimates, and the dividend yield.

LOW PRICE-EARNINGS RATIOS

The cornerstone of any value investing approach is low price-earnings ratios. The difficulty with low price-earnings investing is separating the "good" stocks that are misunderstood by the market, from the "bad" ones that are accurately pegged because of lackluster prospects. Many low price-earnings ratio stocks are banished to the bargain bins, not because they are bad investments with poor outlooks, but because their earnings and growth prospects do not excite investors, leaving them out of favor among the masses.

Separating the two involves a willingness to roll up your sleeves and dive into mounds of research, analyzing many different industries and reviewing individual company financial statements. Neff continually found and bagged low price-earnings multiple stocks primed for market upgrades.

ESTIMATED GROWTH

Low price-earnings ratios alone are not enough; adding solid earnings growth estimates to the equation offers validation that the company may not deserve its low ratio. Admitting that growth estimates are nothing more than educated guesstimates, Neff warns that investors must learn to visualize prospects for the company and its industry and look for confirmation or contradiction of the market's view in the company's fundamentals. The goal of analyzing growth forecasts, Neff argues, is to establish credible growth expectations. Monitoring published earnings estimates and consensus estimates also enhances one's clairvoyance. Neff refers to these consensus estimates as prevailing wisdom in its most literal form. In many cases, the market overreacts if a company misses an earnings estimate—a negative earnings surprise. In this instance, where strong fundamentals remain, buying opportunities present themselves to low price-earnings investors. Concentrating on long-term, five-year estimates, Neff required strong growth forecasts, but not so strong that growth compromised risk; he therefore established a ceiling for any growth forecasts, which will be discussed later.

DIVIDEND YIELD

The results of a low price-earnings ratio strategy often include companies with high dividend yields—low

TABLE 1. SELECTED FIRMS PASSING THE DIVIDEND-ADJUSTED PEG RATIO SCREEN*

Firm (Exchange: Ticker)	P/E Ratio Firm (X)	P/E Ratio Ind'y (X)	Div. Yield (%)	EPS Growth Est. (%)	Div.-Adj. PEG Ratio (X)	Growth Rate-5yr EPS (%)	Growth Rate-5yr Sales (%)	Operating Margin Firm (%)	Operating Margin Ind'y (%)	Short Description
Basic Materials										
Silgan Holdings (M: SLGN)	6.8	11.2	0.0	11.3	0.60	32.9	16.6	6.6	5.1	Consumer packaging prods
Ivex Packaging Corp. (N: IXX)	8.8	11.2	0.0	13.3	0.66	27.3	10.5	9.5	5.1	Consumer packaging prods
Myers Industries, Inc. (A: MYE)	9.0	11.2	1.7	14.0	0.57	12.0	16.2	11.8	5.1	Plastic storage systems
SPS Technologies (N: ST)	9.9	10.6	0.0	15.0	0.66	67.2	17.7	10.7	5.8	Fasteners & precision tools
Capital Goods										
Hovnanian Enterprises (A: HOV)	4.2	7.0	0.0	10.0	0.42	38.3	19.7	4.5	4.4	Residential condos & homes
USG Corp. (N: USG)	4.4	12.9	1.5	7.7	0.48	43.0	9.5	20.5	13.0	Building materials
Miller Building Systems (M: MBSI)	5.3	7.0	0.0	20.0	0.27	48.4	11.2	8.4	4.4	Factory-built buildings
Gehl Company (M: GEHL)	5.4	12.7	0.0	10.0	0.54	32.1	14.3	12.6	3.9	Construction & agric'l equip
Consumer Cyclical										
Meritor Automotive (N: MRA)	3.3	9.0	3.3	12.0	0.22	32.0	10.9	9.6	5.8	Vehicle components
Maxwell Shoe Co. (M: MAXS)	4.2	14.4	0.0	20.0	0.21	13.8	8.3	5.8	4.4	Brand-name footwear
York Group (M: YRKG)	4.5	9.8	0.0	12.2	0.37	–8.9	10.2	9.5	6.5	Caskets & components
K-Swiss Inc. (M: KSWS)	5.4	14.4	0.4	10.3	0.50	22.6	13.0	16.6	4.4	Athletic footwear
Consumer Non-Cyclical										
Pilgrim's Pride Corp. (N: CHX)	5.7	15.0	0.7	11.0	0.49	16.1	8.0	6.8	5.2	Chicken products
Lancaster Colony Corp. (M: LANC)	9.6	15.0	2.6	12.7	0.63	11.6	7.7	14.9	5.2	Food, auto, glassware
J&J Snack Foods Corp. (M: JJSF)	10.3	15.0	0.0	14.7	0.70	14.0	10.6	8.1	5.2	Snack foods & beverages
Tyson Foods, Inc. (N: TSN)	11.4	15.0	0.0	12.4	0.92	152.2	7.6	6.2	5.2	Poultry-based products
Energy										
USX-Marathon Group (N: MRO)	10.4	15.7	3.2	16.0	0.54	13.9	13.5	6.7	6.7	Crude oil & natural gas
Kerr-McGee Corp. (N:KMG)	11.8	15.7	3.1	10.1	0.89	–1.2	11.5	20.4	6.7	Crude oil & natural gas
Financial										
Heller Financial (N: HF)	7.0	11.3	2.0	14.9	0.41	16.5	11.3	47.2	12.4	Commercial finance servs
World Acceptance Corp. (M: WRLD)	7.0	11.3	0.0	12.0	0.58	6.9	12.6	19.9	12.4	Consumer small loans
Enhance Financial Serv (N: EFS)	7.7	11.6	1.7	14.4	0.48	19.6	15.6	29.4	9.2	Guaranty insurance
MIIX Group, Inc. (N: MHU)	8.1	11.6	1.6	12.0	0.60	NA	16.2	11.1	9.2	Medical prof insurance
Healthcare										
National Healthcare Corp. (A: NHC)	6.3	13.9	0.0	18.8	0.34	–18.3	8.0	3.2	0.4	Long-term care centers
Curative Health Services (M: CURE)	7.0	13.9	0.0	16.7	0.42	27.4	20.0	11.4	0.4	Wound care centers
Mallinckrodt Inc. (N: MKG)	10.1	28.6	2.4	8.0	0.97	15.5	7.7	12.5	–52.0	Healthcare equip
National Dentex Corp. (M: NADX)	10.6	13.9	0.0	15.0	0.71	13.5	13.0	12.2	0.4	Dental labs
Services										
Boyd Gaming Corp. (N: BYD)	3.7	14.6	0.0	12.5	0.30	–0.6	8.4	19.5	7.2	Casinos
Educational Development (M: EDUC)	5.2	16.7	0.8	10.0	0.48	7.6	16.1	9.8	9.8	Distribs children's books
Westaff, Inc. (M: WSTF)	5.5	15.8	0.0	17.5	0.31	2.3	14.1	3.8	2.1	Temp staff for businesses
Right Mgt. Consultants (M: RMCI)	7.6	15.8	0.0	17.5	0.43	7.4	15.3	8.9	2.1	Career consulting
Technology										
Genlyte Group Inc. (M: GLYT)	8.3	21.5	0.0	12.5	0.66	48.3	17.7	8.9	3.7	Lighting fixtures
Esterline Technologies (N: ESL)	8.4	25.6	0.0	10.7	0.79	24.3	9.4	9.6	1.6	Avionics products
GTECH Holdings Corp. (N: GTK)	8.7	29.5	0.0	10.0	0.87	164.3	7.8	17.8	–39.5	On-line lottery prods
Printronix, Inc. (M: PTNX)	9.6	33.5	0.0	20.0	0.48	46.6	10.8	8.2	–0.4	High-speed printers
Transportation										
Arkansas Best Corp. (M: ABFS)	4.9	9.3	0.0	9.0	0.54	25.6	9.4	6.7	3.6	Motor carrier transport
Burlington Nrth./Santa Fe (N: BNI)	10.2	9.6	1.9	9.6	0.89	10.8	12.8	24.4	16.1	Rail transportation
Landstar System, Inc. (M: LSTR)	11.2	9.3	0.0	17.5	0.64	19.3	7.2	6.0	3.6	Truckload carrier servs
SkyWest, Inc. (M: SKYW)	16.5	9.5	0.4	19.3	0.84	18.8	15.6	18.3	6.9	SkyWest airlines

**Table lists the top four firms (lowest P/E ratio) in each industry that passed the screen requirements.*
Data Source: AAII's Stock Investor/Market Guide, Inc. and I/B/E/S. Statistics are as of June 2, 2000.

Exchange Key:
N = New York Stock Exchange
A = American Stock Exchange
M = Nasdaq

price-earnings ratios and strong dividend yields normally go hand in hand, each serving as the flip side of the other. In searching out low price-earnings ratio stocks, Neff also found that high dividend yields serve as price protection: If stock prices fall, a strong dividend yield can help heal many wounds. For that reason, Neff considers dividends a free "plus," meaning that when you purchase a stock paying a dividend, you do not shell out a red cent for that dividend payment.

The list of stocks passing the Neff screen here has at least one company in each sector that pays a dividend (except for technology, which is to be expected), some with very handsome yields. Automotive and truck parts supplier Meritor Automotive (MRA) offers the highest yield at 3.3%. The two passing energy stocks—USX-Marathon Group (MRO) and Kerr-McGee Corporation (KMG)—both post dividend yields greater than 3%.

RUNNING THE SCREEN

Neff discusses a similar version of the dividend-adjusted PEG ratio and used it to find stocks that met a simple "cheapo" profile, as he called it. A "cheapo" stock would have a dividend-adjusted PEG ratio that was noticeably out of line with the current industry or market benchmarks. Stocks with multiples that were discounted up to half the going price for growth were flagged as winners.

As of June 2, 2000, the S&P 500 had a price-earnings ratio of 27.4, an estimated earnings per share growth rate of 8.1% and a dividend yield of 1.1%. These figures translate into a dividend adjusted PEG ratio of 2.98 [27.4 ÷ (8.1 + 1.1)]. Screening for stocks with a dividend-adjusted PEG ratio less than or equal to half the market ratio of 2.98 reduced the database of 9,323 stocks down to 1,873.

The next set of criteria concerns Neff's estimated growth principles. Neff focused on estimated earnings growth rates that were greater than 6% but that do not exceed a 20% ceiling (to avoid stocks that are too risky). Screening for stocks within this future earnings growth range reduced the roster of passing companies to 1,314 stocks.

These initial requirements discussed above are to be considered primary screening criteria.

SALES GROWTH

Neff also highlights a group of secondary principles that help support a low price-earnings strategy. The first of these is sales growth.

In terms of important components in a value investing strategy, Neff considers sales growth just below that of estimated earnings growth. His argument is that growing sales in turn create growing earnings. Any measure of margin improvement can buttress a case for investing, but truly attractive stocks must be able to build on that by demonstrating formidable sales growth. Therefore, the same parameters for estimated earnings growth are applied for sales growth. Sales growth (over the most recently reported five-year period) exceeding 6% but no greater than 20% dropped the number of passing companies to 559.

FREE CASH FLOW

Another secondary component of Neff's approach is free cash flow—cash left over after satisfying capital expenditures. Neff searched for companies that would use this excess cash flow in ways that are pro-investor. Such firms could pay additional dividends, repurchase stock shares, fund acquisitions, or simply reinvest the extra capital back into the firm. In the screen here, we required positive free cash flow over the latest 12-month period and the most recent fiscal year, which dropped the total down to 366.

OPERATING MARGIN

The last key ingredient in this dividend-adjusted PEG ratio screen is an operating margin better than current industry medians. Industry medians are used here as the benchmark because margins tend to be very industry-specific. For example, software vendors enjoy operating margins in excess of 40%, while supermarkets and grocery stores work on very thin margins. Robust operating margin shields a stock against any negative surprises. Our screen required operating margins greater than the industry median for both the latest 12 months and the most recent fiscal year. These last two criteria brought the final total to 221 passing companies.

Table 1 provides a sector breakdown of the passing stocks with the lowest price-earnings ratios. The table is just a sampling that lists each sector's top four passing stocks. Only two energy companies met all of the screening criteria. Some sectors registered more passing companies than others, and some, specifically conglomerates and utilities, had no passing companies at all.

CONTRARIAN YES, FOOLISH NO

As growth stocks continue to ring in the ears of most investors—not to mention the mass of day traders participating in hyper-markets—the ability to hold true to a contrarian style becomes more difficult. As bull markets progress, prevailing wisdom becomes the drumbeat that moves the herd forward, while drowning out the arguments made for a contrarian outlook.

Neff wrote his book in this environment because his investing approach has as much merit today as at any time during the Windsor Fund's reign atop the equity mutual fund world. The arguments favoring value investing are most compelling amid the rage and clamor for hot stocks and hot industries, when

investors are least likely to take heed and listen.

Nevertheless, Neff concedes that it is foolish to be different just to be different. It is fine to be contrarian and question the market's herd mentality, but Neff warns investors not to become so naïve that your stubborn nature consumes you and forces bad decisions. If upon further review, the herd is right about a certain growth stock opportunity, concessions toward your hardened style must be made.

MEASURED PARTICIPATION

The Windsor Fund's systematic contrarian strategy was very successful, but was also flexible. Neff developed a plan called measured participation that helped the fund stay clear of old practices like conventional industry representation. This idea allowed the fund to focus on fresh ideas in portfolio management and promoted "thinking outside the box" when it came to diversification. With measured participation, four broad investment categories were established: highly recognized growth, less recognized growth, moderate growth, and cyclical growth.

Neff was always far more willing to stick his neck out than practice a style of investing that he considered hitting behind the ball—following the masses and getting in on a stock or industry only after the explosion. Measured participation allowed him to do this. Neff would participate in each of these categories, wherever the best value was found—there were no restrictions.

Neff warns investors, however, not to get caught up in the mix and chase highly recognized stocks, like many investors did in the early 1970s with the Nifty Fifty. Some picks can be had, but fair value is rare and must be plucked carefully. Neff suggests that investors instead concentrate research efforts in the less and moderately recognized growth areas, where earnings growth is comparable to that posted by the big growers, but where lack of size and visibility tends to hold many back.

Two examples of this are in the footwear industry and the casinos and gaming industry.

In the footwear industry (consumer cyclical sector), two popular athletic shoe and apparel manufacturers passed the screen—K-Swiss (KSWS) and Nike (NKE). K-Swiss is a significantly smaller, less recognized growth stock compared to the bigger Nike brand name. However, K-Swiss posts relatively comparable earnings growth prospects at a much lower price-earnings ratio.

In the casinos industry (services sector), two companies that passed the screen are Boyd Gaming (BYD) and Harrah's Entertainment (HET). Boyd Gaming is the smaller player at this table, both in terms of market capitalization and sales. Yet Boyd Gaming's earnings forecasts are fairly comparable to that of the bigger high-roller, Harrah's.

As for moderately recognized growth stocks, usually in mature industries, solid investment citizens reside. Moderate growth stocks tend to hold fast to prices during difficult markets, thanks in part to nice dividend yields. Veteran railroader Burlington Northern/Santa Fe (BNI), located in the transportation sector, is a good example. Burlington has a current dividend of 48 cents per share and a strong yield of 1.9%.

Definitions of Screens and Terms

P/E Ratio—Firm: Market price per share divided by the firm's earnings per share. A measure of how the market currently values the firm's earnings growth and risk prospects.

P/E Ratio—Ind'y: Industry median P/E ratio. Reflects the overall valuation of an industry.

Div. Yield: Indicated annual dividends per share divided by price per share. Provides an indication of the income generated by a share of stock.

EPS Growth Est.: Consensus estimate of the long-term three- to five-year) annual growth rate in earnings as tracked by I/B/E/S.

Div.-Adj. PEG Ratio: Price-earnings ratio to earnings per share growth—plus yield. Calculated by dividing the price-earnings ratio of a stock by the sum of its estimated earnings per share growth rate and dividend yield. Provides an indication of the price the market has put on earnings expectations.

Growth Rate-5yr—EPS: Annual percentage growth in earnings per share over the last five fiscal years.

Growth Rate-5yr—Sales: Annual percentage growth in sales over the last five fiscal years.

Operating Margin—Firm: Calculated by dividing the operating income of a stock by its total revenue. Measures the percentage of revenues remaining after paying all operating expenses.

Operating Margin—Ind'y: Industry median operating margin. Reflects the general profitability levels within an industry.

Neff concedes that cyclical growth stocks are somewhat tricky and that timing is everything. The trick is to anticipate increases in demand using your knowledge of the different industries. The apparel, audio & video equipment, footwear, and jewelry industries, for example, are obvious consumer cyclicals. Capital goods producers are also cyclical picks—this includes USG Corp. (USG) and Gehl Co. (GEHL), as well as home building and various construction service contractors.

A final and rather interesting suggestion is to consider investment opportunities at your local shopping mall. Neff recommends visiting a local retailer, listening to what your teenagers think is hot, and counting the piles of receipts from your favorite stores. Do some digging—a prospect might just turn up.

ARGUING WITH THE MARKET

As a contrarian, Neff claims that he has argued with the stock market his entire career. The Windsor Fund's record during his term shows that Neff won more arguments with the market than he lost.

Neff sees successful investing as a step-by-step process, digested in small chunks. It involves doing your homework and it takes a dedication to core principles. He likens his investing strategy to a conservative football playbook void of "Hail Mary" passes, centered rather on a grind-it-out, four yards and a cloud of dust game plan.

Neff also warns investors to maintain a long-term perspective, stating that if you cannot roll with the punches, or are in too big of a hurry, you might as well keep your money under a mattress.

While the stock screens here attempt to capture the principles set forth by John Neff in his book, it is only a starting point, not a recommended list of companies.

Before making any investment decision, you should gather all pertinent information and understand the investment thoroughly. Also, keep in mind that no one investment technique will be best in all market environments and that the techniques that worked in the past may not necessarily prove to be as useful in the future. ◆