



Web-Based Screening Services

by John Bajkowski

After the fact, most winners seemed like obvious choices. In reality, the best gains come from stocks when they are shrouded with some uncertainty regarding their future potential and risk. While you can try to identify promising stocks by wading through tips from Internet bulletin boards, magazines, and TV shows, you will be left with a hodgepodge of ideas to examine for soundness and whether they fit into your overall portfolio design.

Quantitative tools such as screening programs can help investors cut through the fog and identify stocks that possess basic qualities indicating that they merit further attention. Screening is the process of applying a filter that includes one or more quantitative parameters (criteria) against a large group of stocks in order to cull out a small set of stocks that share some common characteristics.

The particular characteristics that investors seek out vary depending upon individual investment philosophy and even time frame. A value investor may look for large-cap stocks with a price-earnings ratio 50% below that of the S&P 500 with recent positive earnings surprises. On the other hand, a growth investor may seek out smaller stocks with strong earnings growth and increasing price momentum.

Even if you wish to rely on outside tips for investing ideas, the company and industry data within a stock screening system can provide an initial impression of a company and its prospects or confirm an idea that was, at first, suspect.

Express Delivery

The most powerful screening systems geared toward individuals traditionally have been stand-alone software programs running on individual personal computers. Within the last year many powerful Web-based screening tools have developed that

couple a rich up-to-date database with a powerful screening engine. While the majority of free Web sites still offer very basic screening, this article reveals a few fee and free sites that provide strong screening modules.

Comparing Screening Services

When comparing stock screening services, you should consider the following critical factors:

- the universe of stocks supported by the database
- depth of stock information
- flexibility of screening software

Information on these areas is detailed in the following pages. The comparison grid on pages 10 through 15 lists information about subscription costs, program features, and basic database content. Table 1 on pages 16 and 17 details the financial statement elements provided from the income statement, balance sheet, and statement of cash flows by each service.

Company Universe

Screening dictates that the search process start with a broad universe of companies. Better screening programs cover a wide range of companies. Some offer substantial coverage that includes Nasdaq National Market companies and even Nasdaq Bulletin Board companies. This is one of the easiest ways to gather data about smaller firms. Information on the number of companies tracked is provided in the comparison grid.

Depth of Company Information

Screening services vary in the depth of information provided. Some services, such as INVESTools, provide fewer data items for each company and instead depend on summary statistics such as growth rates and rankings when providing background data. Other services, such as Market Guide and MSN MoneyCentral Inves-

tor, provide both summary statistics and the raw data behind these numbers.

In considering a data service, look not only at the number of variables but also specifically at which statistics are provided. Morningstar established proprietary ratings for company growth, profitability, financial health, and valuation, which may be more important for some investors than the completeness of the database.

When performing fundamental screening, the information generally falls into the following categories:

- multiples
- historical growth rates
- estimates and recommendations
- financial ratios
- financial statement data
- industry comparisons
- price and share data
- company information

Multiples

Multiples are the core variables of many fundamental screens. They relate the current stock price to a tangible company item such as earnings per share or book value per share. Multiples provide an indication of how the market values the company's future prospects. Companies with brighter futures typically trade with higher multiples.

Look for a broad range of multiples covering items such as earnings, book value, cash flow, and dividends. Historical ratios help indicate normal trading ranges and provide a base from which to compare current multiples. Therefore, historical average multiples are a key element when choosing a service. Supported multiples are revealed within the ratios segment of the comparison grid.

Historical Growth Rates

Growth rates paint a picture of past company performance and provide an easy way to compare companies. In-

vestors seek out quickly growing firms with the hope that growth will continue to drive the stock price up. Five-year growth rates are normally presented for sales, earnings, and dividends. The more powerful sites have a wider range of growth rates for various time periods. The comparison grid indicates which growth rates are provided by each Web site along with the time periods covered and their presentation format.

Estimates & Recommendations

The market is driven by expectations. A growing number of screening services are presenting consensus earnings estimates and buy/hold/sell recommendations. Consensus estimates are calculated by polling thousands of analysts for earnings estimates of the companies they cover. Services also poll analysts to report their ratings on the overall attractiveness of stocks in an attempt to derive uniform consensus recommendations. These estimates and recommendations allow investors to directly gauge the expectations built into the stock price.

Changes to recommendations and earnings estimates may be as important to study as the actual figures themselves. Look for an indication of recent revisions or surprises.

Financial Ratios

Ratios help you summarize financial statement data into a format that can be easily manipulated to compare year-to-year changes for a company or to compare one company against another.

Leverage ratios examine the company's use of debt in its financial structure. Effective use of debt can enhance shareholder profitability at the risk of saddling the company with an interest payment that must be made in good times and bad. Common leverage ratios include debt to equity, liabilities as a percentage of assets, and long-term debt as a percentage of capital.

Liquidity ratios try to gauge a firm's ability to meet its short-term obligations. While liquidity measures are of

Key to Abbreviations in Comparison Grid	
Exchange Key:	Key to Ratios:
NY = New York Stock Exchange	Profitability:
AM = American Stock Exchange	PM = profit margin
NNM = Nasdaq National Market	ROA = return on assets
NSC = Nasdaq Small Cap	ROE = return on equity
Key to Ratios:	Multiples:
Leverage:	P/E = price-earnings ratio
assets/eq = assets to equity	P/B = price-to-book-value ratio
debt/eq = debt to equity	P/S = price-to-sales ratio
lt debt/eq = long-term debt to equity	P/CF = price-to-cash-flow ratio
liab/assets = liabilities to assets	P/FCF = price-to-free-cash-flow ratio

greater interest to creditors than equity investors, you may want to glance at these ratios if you are looking for high-yielding stocks. Typical liquidity ratios include the quick ratio and current ratio.

Profitability ratios benchmark company performance and highlight trends when examined over time—as well as indicate strong and weak performance when compared to other firms. Common profitability ratios include return on assets (ROA), return on equity (ROE), gross margins, operating margins, and net profit margins.

Industry comparisons are useful in identifying standout firms. Multiples, growth rates and ratios give you an added measure of information when analyzed in the context of industry norms. Industry multiples may highlight out-of-favor sectors ready for a rebound.

However, most ratios vary widely among industries and cannot be examined outside an industry context. Look for programs that provide industry statistics or at least allow you to screen for companies in a similar industry and then analyze those firms as a group. Some systems even allow you to screen for companies outperforming industry norms.

Financial Statement Data

The raw data serves as the basis for the calculation of ratios, growth rates, and multiples. Financial statement data is useful for analyzing a single firm, but is more difficult to use directly in screening and ranking. Nevertheless, the better sites include

enough information from the income statement, balance sheet, and cash flow statement to judge whether the ratios and growth rates properly reflect the company's prospects. Some sites offer practically no raw data, while others provide a rich history. Table 1 details the financial statement information provided by the site. By examining the year-by-year earnings of a firm you can gain a feel for performance consistency and earnings trends (which growth rates often mask).

Price and Share Data

The price and share data describe various market-related aspects of the company's common stock. The extent and detail of historical price data as well as volume data is listed in the comparison grid. Other measures such as beta, relative strength, market capitalization and holdings by insiders and institutions are also noted. If you focus on price momentum, look for enough price data to examine price movement or summary statistics such as relative strength.

Company Information

Company information consists of basic data such as the firm's street and Web address and phone number, so you can request financial statements or speak to the investor relations department for clarification. Basic company descriptions are also common. The inclusion of expanded descriptions, which also cover recent operating results, is the latest trend among the screening services.

(continued on p.15)

PRODUCT COMPARISON: WEB-BASED SCREENING SERVICES

Screening Service		FinancialWeb.com, Inc.	INVESTools, Inc.
Company		www.financialweb.com	www.investools.com
Web Address		daily	weekly
Update Schedule		free	predefined—free; advanced—\$9.95/mo.
Price			✓ (1 month free)
Demo (Cost)		Media General, Comtex, Partes	SimplyStocks.com, Zacks
Data Source			
Database Content	Number of Stocks	50,000+	9,400
	Number of Data Fields	200+	68
	Number of Data Fields for Sorting	35	68
	Company Information	Address/Phone	✓
		Company Web link	
		ADR	
		DRP Plan	
		Employees	
		Industry Grouping	✓
		Description Length	40 words
	Earnings Estimates	Source	Zacks
		Quarterly	✓ (1 quarter)
		Annual	✓ (2 years)
		Growth—Long Term	✓ (5 years)
		Surprise	
		Revisions	
	Analyst Recommendations		✓
	Analyst Recommendations—Changes		
	Ratios	Leverage	debt/eq
		Liquidity	current
		Profitability	ROE, ROA, PM
		Multiples	P/E, P/B, yield
	Growth Rates	Elements	sales, EPS, price
		Periods	✓ (TTM, 5-yr)
		Total/Annualized	✓ (annualized)
	Price & Share Data	High/Low/Close/Volume	✓ (52-wk)
		Average Volume	✓
		Relative Strength	✓ (4-, 52-week)
		Beta	✓
		Short	
	Insider Holdings		✓ (market cap)
	Insider Trading		✓ (%)
	Institutional Holdings		✓ (buy, sell, net trades)
	Institutional Trading		✓ (%) (number)
	Institutional Trading		✓ (%) (number)
	Institutional Trading		✓ (net trades)
Screening	Number of Data Fields for Screening	35	68
	Any Data Field		✓
	Against Constant Values	✓	✓
	Against Other Data Fields		
	Against Industry		
	Save Custom Screens		✓
	# of Predefined Screens		9
Viewing	Browse Table	✓	✓
	Financial Statement Presentation	total \$, per share	total \$, per share
	Individual Company Summaries	✓	✓
Reporting	Charts/Graphs	✓	✓ (extra cost)
	Export to a File		

Market Guide, Inc.	Morningstar, Inc.	Morningstar, Inc.
www.marketguide.com	www.morningstar.com	www.morningstar.net
weekly	daily	daily
free	free with any Internet access	\$9.95/month or \$99/year
		✓ (1 month free)
Market Guide	Morningstar, S&P, Zacks, Disclosure	Morningstar, S&P, Zacks, Dow Jones, Disclosure
13,000	8,000+	8,000+
1,000+	400+	600
84	19	125
✓	✓	✓
	✓	✓
✓	✓	✓
	✓	✓
✓	✓	✓
✓ (Market Guide, SIC)	✓ (Morningstar)	✓ (Morningstar)
6 sentences	100 words	500 words
	Zacks	Zacks
✓ (1 quarter)	✓ (2 quarters)	✓ (2 quarters)
✓ (1 year)	✓ (2 years)	✓ (2 years)
✓	✓ (5 years)	✓ (3, 5 years)
✓	✓	✓
	✓	✓
✓	✓	✓
	✓	✓
debt/eq	debt/eq	debt/eq
current		current
ROE, ROA, PM	ROE, ROA, PM	ROE, ROA, PM
P/E, P/B, P/S, P/CF, yield	P/E, P/B, P/S, P/CF, P/FCF, yield	P/E, P/B, P/S, P/CF, P/FCF, yield
sales, EPS, dividends, cap spending	sales, EPS, dividends	sales, EPS, book value, dividends
✓ (Qtrly, TTM, 3-, 5-yr)	✓ (1, 3-yr)	✓ (5 yrs of year-by-year, 3 yr)
✓ (annualized)	✓ (annualized)	✓ (annualized)
✓ (5-yr chart)	✓ (chart 30 yrs)	✓ (chart 30 yrs)
✓		
✓ (4-, 13-, 26-, 52-week)	✓	✓
✓		
✓ (interest, ratio)		
✓	✓ (market cap/float)	✓ (market cap/float)
✓ (%)	✓ (% , number)	✓ (% , number)
✓ (net trades)	✓	✓
✓ (% , number)	✓ (% inst'l held by mutual funds)	✓ (% inst'l held by mutual funds)
✓ (net trades)		
84	19	125
✓		
✓	✓	✓
✓		✓ (S&P 500)
✓		
10	7	7
✓	✓	✓
total \$, per share, % change	total \$, per share, % change, common size	total \$, per share, % change, common size
✓	✓	✓
✓	✓	✓
✓		✓

PRODUCT COMPARISON: WEB-BASED SCREENING SERVICES

Screening Service		MSN MoneyCentral Investor	Quicken.com
Company		Microsoft, Inc.	Intuit Inc.
Web Address		moneycentral.msn.com/investor	www.quicken.com
Update Schedule		daily	daily
Price		free	free
Demo (Cost)			
Data Source		Disclosure, Hoovers, Zacks, Media General	S&P, Zacks, Bus. Wire, PR News, Reuters, Vic
Database Content	Number of Stocks	8,000+	9,600
	Number of Data Fields	1,500	1,000
	Number of Data Fields for Sorting	200	8
	Company Information	Address/Phone	✓
		Company Web link	✓
		ADR	✓
		DRP Plan	
		Employees	✓
		Industry Grouping	✓ (Media General)
		Description Length	500 words
			40 words
	Earnings Estimates	Source	Zacks
		Quarterly	✓ (2 quarters)
		Annual	✓ (2 years)
		Growth—Long Term	✓ (5 years)
		Surprise	✓
		Revisions	✓
			✓
	Analyst Recommendations		✓
	Analyst Recommendations—Changes		✓
	Ratios	Leverage	debt/eq
		Liquidity	current, quick
		Profitability	ROE, PM, net PM, gross PM
		Multiples	P/E, P/B, P/S, P/CF, yield
	Growth Rates	Elements	sales, EPS, book value, dividends
		Periods	✓ (1-, 5-yr)
		Total/Annualized	✓ (annualized)
			✓ (annualized)
	Price & Share Data	High/Low/Close/Volume	✓ (daily for up to 10 yrs)
		Average Volume	
		Relative Strength	✓ (1-wk, 1, 3, 6, 12-mo)
		Beta	✓
		Short	
		Market Cap/Float	✓ (market cap)
	Insider Holdings		✓
	Insider Trading		✓
	Institutional Holdings		✓
	Institutional Trading		
Screening	Number of Data Fields for Screening	200	33
	Any Data Field		
	Against Constant Values	✓	✓
	Against Other Data Fields	✓	
	Against Industry	✓	
	Save Custom Screens	✓	
	# of Predefined Screens	12	6
Viewing	Browse Table	✓	✓
	Financial Statement Presentation	total \$, per share	total \$
	Individual Company Summaries	✓	✓
Reporting	Charts/Graphs	✓	✓
	Export to a File	✓	

	S&P Personal Wealth	StockScreener	Thomson Investors Network
	Standard & Poor's	Hoover's, Inc.	Thomson Financial Services, Inc.
	www.personalwealth.com	www.stockscreener.com	www.thomsoninvest.net
	daily	daily	monthly
	\$9.95/month or \$99.95/year	free	\$34.95/year
	✓ (1 month free)		✓ (1 month free)
kers	S&P, BigCharts	Hoover's, Media General	First Call, CDA, Spectrum, Media General
	9,000	9,000	7,300
	400+	22	500+
	28	22	
	✓	✓	✓
	✓	✓	
	✓		
			✓
	✓	✓	✓
	✓	✓	✓
	500 words	100 words	one line
	S&P		First Call
	✓ (1 quarter)		✓ (last and current)
	✓ (2 years)		✓ (2 years)
			✓ (1 year)
	✓		✓
			✓
	debt/eq	debt/eq	debt/eq
	current	current	current, quick
	ROE, ROA, PM	ROE, PM	ROE, PM, net PM, gross PM
	P/E, yield	P/E, P/B, yield	P/E, P/B, P/S, P/CF, yield
	sales, EPS, dividends	sales, EPS, dividends	sales, EPS, dividends
	✓ (5-yr)	✓ (5-yr)	✓ (5-yr)
	✓ (annualized)		✓ (annualized)
	✓ (5-yrs)		✓ (52-wk high, low/daily close)
			✓ (5-, 200-day, 10-week)
	✓		✓
			✓
	✓ (market cap)	✓ (market cap)	✓ (market cap)
	✓		✓
			✓
	✓		✓
			✓
	28	22	18
		✓	
	✓		✓
	5		10
	✓		
	total \$, per share		total \$, per share, % chg
	✓		✓
	✓		✓

PRODUCT COMPARISON: WEB-BASED SCREENING SERVICES

Screening Service		TraderBot	Wall Street City Pro
Company		TraderBot Inc.	Telescan, Inc.
Web Address		www.traderbot.com	www.wallstreetcity.com
Update Schedule		real-time	daily
Price		\$39.95/month or \$249.95/year	free to \$9.95/month
Demo (Cost)		✓ (1 month & non-market hours free)	✓ (first 30 days free)
Data Source		Media General	S&P Comstock, Zacks, Market Guide
Database Content	Number of Stocks	9,000	14,000
	Number of Data Fields	200+	1,000
	Number of Data Fields for Sorting	30	1
	Company Information	Address/Phone	✓
		Company Web link	
		ADR	
		DRP Plan	
		Employees	✓
		Industry Grouping	✓
		Description Length	25 words
	Earnings Estimates	Source	Zacks
		Quarterly	✓
		Annual	✓
		Growth—Long Term	✓
		Surprise	✓
		Revisions	✓
	Analyst Recommendations		✓
	Analyst Recommendations—Changes		✓
	Ratios	Leverage	debt/eq
		Liquidity	interest coverage
		Profitability	ROE, ROA, PM
		Multiples	P/E, P/B, P/S
	Growth Rates	Elements	sales, EPS, dividends
		Periods	✓ (5-yr)
		Total/Annualized	✓ (annualized)
	Price & Share Data	High/Low/Close/Volume	✓ (52-wk high, low/daily close)
		Average Volume	✓
		Relative Strength	✓
		Beta	✓
		Short	
		Market Cap/Float	✓
	Insider Holdings		✓
	Insider Trading		✓
	Institutional Holdings		✓
	Institutional Trading		✓
Screening	Number of Data Fields for Screening	30	700
	Any Data Field		✓
	Against Constant Values	✓	
	Against Other Data Fields	✓	
	Against Industry		
	Save Custom Screens	✓	✓
	# of Predefined Screens	17	50+
Viewing	Browse Table	✓	✓
	Financial Statement Presentation	total \$, per share	total \$, per share, % change
	Individual Company Summaries	✓	✓
Reporting	Charts/Graphs	✓	✓
	Export to a File		✓

See key on p.9 for abbreviations used here.

Yahoo! Finance	Zacks Advisor
Yahoo! Inc.	Zacks Investment Research
quote.yahoo.com	www.zacksadvisor.com
daily	daily
free	\$249/yr (real-time); \$199/yr (no real-time)
	✓ (1 month free)
Market Guide, Zacks	Zacks
9,000	6,000
200	1,500
8	
✓	
✓	
	✓
✓	
✓	✓
6 sentences	50 words
Zacks	Zacks
✓ (2 quarters)	✓ (2 quarters)
✓ (2 years)	✓ (2 years)
✓ (1, 5 years)	✓ (5 years)
✓	✓
✓	✓
✓	✓
✓	✓
debt/eq	debt/eq, lt debt/eq
current	current, quick
ROE, ROA, PM	ROE, ROA, PM
P/E, P/B, P/S, yield	P/E, P/B, yield
sales, EPS, book value, dividends	sales, EPS, book value, dividends
✓ (5-yr)	✓
✓ (annualized)	✓
✓ (chart 1960+)	✓ (high/low/close)
✓	
✓	✓ (YTD)
✓	✓
✓	
✓	✓ (market cap)
✓	✓
✓	✓
✓	✓
8	100
✓	✓
	✓
	13
✓	✓
total \$, per share	total \$, per share, % chg
✓	✓
✓	✓

Screening Power & Flexibility

The core feature of any screening system is its set of screening capabilities. The comparison grid includes several categories that describe the screening features provided by the services. When designing screening criteria, the site should allow you to screen against a constant value or another field. Some sites even allow you to compare a value against industry norms. Services such as Morningstar's Premium Stock Selector provide benchmark figures for each field to help you construct reasonable screening criteria. The screening system should also keep track of the number of companies passing each filter.

Most Web-based screening tools do not allow you to save a set of screening criteria for use in a later session. This will force you to reconstruct the entire screen every time you wish to apply the screen. The grid indicates which services allow you to save screening criteria.

Reporting Capabilities

A single company report will typically detail all of the information provided by the database for a company. Tabular reports allow you to compare specific data items for a group of companies. Less common, but still useful, is an industry report that lists the statistics for a particular industry.

Screening Is a First Step

Remember when working with fundamental screening programs, data errors will exist. The wider the usage of the data, the more likely it is that data errors will be found quickly and corrected. Screening is merely the first step in the security analysis process. After screening, further in-depth analysis is required. However, a good screening system should help point you in the right direction.

FinancialWeb

FinancialWeb is collection of Web sites offering a myriad of free investment information on stocks, mutual funds, and options. The site offers all of the basic elements including real-time quotes, portfolio management, market commentary and news, charting, E-mail alerts, and company research. While the screening module does not live up to its billing as "best free screener on the Web," it does offer a well-thought-out collection of 35 screening variables. All of the basic screening areas are covered—price and volume movement, company size, growth, valuation levels, and financial strength. Notably, investors can seek out stocks with recent price or volume

Table 1. Web-Based Screening Services: Financial Data
Number of Quarters (Q) and Number of Years (Y) of Data Provided

	Financial-Web	INVESTools	Marketguide.com—NetScreen	Morning-star.com	MSN MoneyCentral Investor	Quicken.com
Income Statement						
Sales	5Qs, 4Ys	8Qs, 4Ys	16Qs, 5Ys	4Qs, 5Ys	12Qs, 10Ys	4Qs, 4Ys
Cost of Sales		8Qs, 4Ys	5Qs, 5Ys		5Qs, 5Ys	4Qs, 4Ys
Selling & Administrative Expenses		8Qs, 4Ys	5Qs, 5Ys		5Qs, 5Ys	
Research & Development Expenses		8Qs, 4Ys	5Qs, 5Ys			
Depreciation, Amortization		8Qs, 4Ys	5Qs, 5Ys	3Ys	5Qs, 10Ys	
Interest		8Qs, 4Ys	5Qs, 5Ys		5Qs, 5Ys	4Qs, 4Ys
Non-Operating Income/Expenses		8Qs, 4Ys	5Qs, 5Ys		5Qs, 5Ys	
Taxes		8Qs, 4Ys	5Qs, 5Ys	5Ys	5Qs, 5Ys	4Qs, 4Ys
Extraordinary Items		8Qs, 4Ys	5Qs, 5Ys		5Qs, 5Ys	4Qs, 4Ys
Net Income	5Qs, 4Ys	8Qs, 4Ys	5Qs, 5Ys	4Qs, 5Ys	5Qs, 10Ys	4Qs, 4Ys
EPS	5Qs, 4Ys	8Qs, 4Ys	16Qs, 5Ys	4Qs, 5Ys	12Qs, 10Ys	4Qs, 4Ys
Dividends	5Qs, 4Ys	8Qs, 4Ys	5Qs, 5Ys	24Qs, 5Ys	5Qs, 5Ys	1Y
Balance Sheet						
Cash		8Qs, 4Ys	5Qs, 5Ys	1Q	5Qs, 5Ys	4Qs, 4Ys
Accounts Receivable		8Qs, 4Ys	5Qs, 5Ys		5Qs, 5Ys	4Qs, 4Ys
Inventory		8Qs, 4Ys	5Qs, 5Ys		5Qs, 5Ys	4Qs, 4Ys
Total Current Assets	1Q, 4Ys	8Qs, 4Ys	5Qs, 5Ys	1Q	5Qs, 10Ys	4Qs, 4Ys
Equipment		8Qs, 4Ys	5Qs, 5Ys		5Qs, 5Ys	
Accumulated Depreciation		8Qs, 4Ys	5Qs, 5Ys		5Qs, 5Ys	4Qs, 4Ys
Net Plant & Equipment		8Qs, 4Ys	5Qs, 5Ys		5Qs, 5Ys	4Qs, 4Ys
Investments		8Qs, 4Ys	5Qs, 5Ys			
Deferred Charges						
Intangible Assets			5Qs, 5Ys		5Qs, 5Ys	
Total Long-Term Assets			5Qs, 5Ys	1Q	5Qs, 5Ys	
Total Assets		4Qs, 4Ys	5Qs, 5Ys	1Q	5Qs, 5Ys	4Qs, 4Ys
Accounts Payable		4Qs, 4Ys	5Qs, 5Ys		5Qs, 5Ys	
Accrued Expenses		4Qs, 4Ys	5Qs, 5Ys			
Notes Payable		4Qs, 4Ys	5Qs, 5Ys			
Current Portion of Long-Term Debt		4Qs, 4Ys	5Qs, 5Ys		5Qs, 5Ys	
Total Current Liabilities	1Q, 4Ys	4Qs, 4Ys	5Qs, 5Ys	1Q	5Qs, 10Ys	4Qs, 4Ys
Long-Term Debt	1Q, 4Ys	4Qs, 4Ys	5Qs, 5Ys	1Q (5Ys Prem.)	5Qs, 10Ys	4Qs, 4Ys
Total Liabilities	1Q, 4Ys	4Qs, 4Ys	5Qs, 5Ys		5Qs, 5Ys	
Preferred Stock			5Qs, 5Ys		5Qs, 5Ys	4Qs, 4Ys
Total Common Equity	1Q, 4Ys	4Qs, 4Ys	5Qs, 5Ys	1Q (5Ys Prem.)	5Qs, 5Ys	4Qs, 4Ys
Total Liabilities & Owner's Equity		4Qs, 4Ys	5Qs, 5Ys	1Q	5Qs, 5Ys	4Qs, 4Ys
Statement of Cash Flows						
Net Cash from Operations		2Qs, 4Ys	5Qs, 5Ys	3Ys	5Qs, 5Ys	
Net Cash from Investing Activities		2Qs, 4Ys	5Qs, 5Ys		5Qs, 5Ys	
Capital Expenditures		2Qs, 4Ys	5Qs, 5Ys	3Ys	5Qs, 5Ys	
Net Cash From Financial Activities		2Qs, 4Ys	5Qs, 5Ys		5Qs, 5Ys	
Free Cash Flow				3Ys	5Qs, 5Ys	

movements and perform industry comparisons using price-earnings ratios or profit margins.

The site provides an interesting segment titled "Stock Detective" that highlights potential market scams with educational articles and lists of stocks and promoters possibly involved in fraudulent or questionable activities.

Overall, FinancialWeb is a solid offering whose strength lies in its rich collection of information and tools.

INVESTools

INVESTools offers a range of screening and subscription options on its Web site covering basic portfolio management tools, stock and mutual fund

analysis and even on-line versions of investment newsletters. Three levels of screening are available through INVESTools—predefined, basic, and advanced.

INVESTools offers nine predefined filters that can be accessed by all Internet users. The free predefined screens cover a reasonable range of

Source	S&P Personal Wealth	Stock-Screener	Thomson Investors Network	TraderBot	Wall Street City Pro	Yahoo! Finance	Zacks Advisor
	24Qs, 6Ys	4Qs, 10Ys	2Qs, 4Ys	6Ys	4Qs, 2Ys	16Qs, 4Ys	8Qs, 5Ys
		4Qs, 3Ys	2Qs, 4Ys		4Qs, 2Ys	2Qs, 3Ys	8Qs, 5Ys
		4Qs, 3Ys	2Qs, 4Ys		4Qs, 2Ys		8Qs, 5Ys
					4Qs, 2Ys		8Qs, 5Ys
	6Ys	4Qs, 3Ys	2Qs, 4Ys	6Ys	2Qs, 2Ys		8Qs, 5Ys
	6Ys		2Qs, 4Ys		2Ys		8Qs, 5Ys
		4Qs, 3Ys	2Qs, 4Ys		2Ys	2Qs, 3Ys	8Qs, 5Ys
	6Ys	4Qs, 3Ys	2Qs, 4Ys		4Qs, 2Ys	2Qs, 3Ys	8Qs, 5Ys
			2Qs, 4Ys		2Ys	2Qs, 3Ys	8Qs, 5Ys
	6Ys	4Qs, 10Ys	2Qs, 4Ys	6Ys	4Qs, 2Ys	2Qs, 3Ys	8Qs, 5Ys
	24Qs, 6Ys	4Qs, 10Ys	2Qs, 4Ys	6Ys	4Qs, 2Ys	16Qs, 4Ys	8Qs, 5Ys
	6Ys	4Qs, 10Ys	2Qs, 4Ys	6Ys	2Ys	2Qs, 3Ys	
	6Ys	4Qs, 3Ys	2Qs, 4Ys		4Qs, 4Ys	2Qs, 3Ys	8Qs, 5Ys
		4Qs, 3Ys	2Qs, 4Ys		4Qs, 4Ys	2Qs, 3Ys	8Qs, 5Ys
		4Qs, 3Ys	2Qs, 4Ys		4Qs, 4Ys		8Qs, 5Ys
	6Ys	4Qs, 3Ys	2Qs, 4Ys	6Ys	4Qs, 4Ys	2Qs, 3Ys	8Qs, 5Ys
			2Qs, 4Ys		2Ys		
			2Qs, 4Ys		2Ys		
		4Qs, 3Ys	2Qs, 4Ys			2Qs, 3Ys	8Qs, 5Ys
					4Qs, 2Ys	2Qs, 3Ys	8Qs, 5Ys
					2Ys		8Qs, 5Ys
			2Qs, 4Ys		2Ys		8Qs, 5Ys
	6Ys	4Qs, 3Ys	2Qs, 4Ys		4Qs, 2Ys		
		4Qs, 3Ys	2Qs, 4Ys		4Qs, 4Ys	2Qs, 3Ys	8Qs, 5Ys
					4Qs, 4Ys	2Qs, 3Ys	8Qs, 5Ys
		4Qs, 3Ys	2Qs, 4Ys		4Qs, 4Ys		8Qs, 5Ys
							8Qs, 5Ys
	6Ys	4Qs, 3Ys	2Qs, 4Ys	6Ys	4Qs, 4Ys	2Qs, 3Ys	8Qs, 5Ys
	6Ys	4Qs, 3Ys	2Qs, 4Ys	6Ys	4Qs, 4Ys	2Qs, 3Ys	8Qs, 5Ys
		4Qs, 3Ys	2Qs, 4Ys		4Qs, 4Ys	2Qs, 3Ys	8Qs, 5Ys
		4Qs, 3Ys	2Qs, 4Ys		4Qs, 4Ys	2Qs, 3Ys	8Qs, 5Ys
	6Ys	4Qs, 3Ys	2Qs, 4Ys	6Ys	4Qs, 4Ys	2Qs, 3Ys	8Qs, 5Ys
	6Ys		2Qs, 4Ys		4Qs, 4Ys	2Qs, 3Ys	8Qs, 5Ys
		4Qs, 3Ys	4Ys		2Qs, 4Ys	2Qs, 3Ys	5Ys
		4Qs, 3Ys	4Ys		2Qs, 4Ys	2Qs, 3Ys	5Ys
	6Ys	4Qs, 3Ys	4Ys		2Qs, 4Ys	2Qs, 3Ys	5Ys
		4Qs, 3Ys	4Ys		2Qs, 4Ys	2Qs, 3Ys	5Ys
	6Ys						5Ys

growth, value, and capitalization screens. Screening results include company information on each of the variables used in the screen along with links to fundamental data on the companies.

Basic screening is included with INVESTools' \$9.95 per month portfolio workshop subscription, which in-

cludes portfolio monitoring, news, charts, Zacks earnings estimates, and Simply Stocks.com reports. The basic screening service allows you to modify the predefined screens to fine-tune their results.

The advanced screening module (\$9.95 per month) gives access to 68 different variables spread across a

wide range of company statistics, growth rates, and ratios. Comparison can only be made against constants. For some fields, users are given the option of specifying minimum and maximum values, but the majority of the criteria allow for only one comparison value. Notably, screens can be saved for later use.

Results of screens are presented in a table consisting of the companies passing the filter and the values for each of the variables used in the screen. The results can be sorted by any of the variables used in the screen.

The site's portfolio workshop section offers subscriptions that provide a good balance between portfolio monitoring and stock research, but combining the portfolio workshop with the advanced stock screening brings the cost to about \$20 per month, reducing the value of the service.

Marketguide.com—NetScreen

NetScreen is a free, Java-based screening tool available on the Market Guide Web site. Market Guide has enhanced the screening module to cover over 80 data items. Users can even create their own custom fields, a unique feature for Web-based tools. While more cumbersome than most systems, Market Guide allows for the creation of fairly complex screening criteria. A single line in a filter can include mathematical and logical manipulation. Screening results are displayed in a table that includes the variables used in the filter and links to company reports on the passing companies. The results table can even be saved as a spreadsheet file. Screens can be saved for use at a later time.

The free company research reports steal the show on the Market Guide Web site. Market Guide is a well-respected supplier of company fundamental and price data. The Market Guide database covers over 9,000 active stocks trading on the New York Stock Exchange, American Stock Exchange, Nasdaq National and Small Cap market, and over-the-counter stocks. Its snapshot and highlight reports are found throughout the Web, but the Market Guide Web site goes further by providing free reports covering earnings estimates, ratio comparisons, insider trading, institutional ownership, company financials, and dividend reinvestment plan details.

The "What's Hot" segment of the Web site is also worthy of mention. It

provides daily rankings of the best- and worst-performing stocks, industries and sectors. Links are provided to the stocks within a given industry or sector for additional research.

The detailed company and industry data coupled with the free NetScreen offering makes the Market Guide Web site worth checking out.

Morningstar.com

Morningstar.com is a full-featured investment Web site providing portfolio tracking, market monitoring, stock and fund screening and research, educational articles and message boards. Much of the site is free, with additional research and screening available with a \$9.95 per month subscription.

Research on the site consists of stock screening coupled with research reports. Morningstar has enhanced its free screening to cover 19 basic elements. Morningstar now grades stocks on their growth, profitability, financial health, and valuation, and the emphasis within the free screening module is on these elements along with the stock's style characteristics. The premium screening module is well executed, allowing investors to pick from 125 criteria for stocks, but is limited to performing comparisons against user-entered constant values, and the screens cannot be saved for use at a later time.

Comprehensive stock reports start with an overview snapshot and lead to a detailed company profile, financial statements and ratios, charting from BigCharts, stock price performance statistics, stock, industry and market multiples, earnings estimates and analyst opinions, industry snapshot, insider and institutional shareholder activity, SEC filings, and news. Five years of income statement items and current balance sheet data are provided. Notably, Morningstar is unique in offering data on the various reporting segments of companies. The information will vary from company to company with data on some companies including extensive breakdowns by both region and business segment. The premium reports add commentary

from Morningstar analysts and explanations behind weekly stock grades.

Articles with a focus on current market issues, interviews and detailed educational features are located throughout the site. Message boards provide a forum for discussion of the many issues brought up in the articles.

Morningstar.com is a well-organized Web site that provides a diverse and useful set of tools for the stock investor.

MSN MoneyCentral Investor

Microsoft offers a complete personal finance and investing site through its free MSN Web portal. The investing section offers portfolio tracking, charts, news, educational articles, stock and mutual fund research, and brokerage services. Access to articles, news, screens, company and mutual fund data, and portfolio tracking is free to all Internet users. The site provides one of the best portfolio managers on the Web with a well-thought-out module that tracks your holdings, reports the cost and current value, and alerts you to related news stories when you examine your holdings on-line.

Articles cover a wide range of topics ranging from discussions of current market events to detailed examinations of stock analysis techniques. News articles are posted daily, with historical articles archived by topic.

The research and screening module on the site is also top-notch. As revealed in the comparison grid, the company coverage is both broad and deep. Microsoft has pulled together the content of Disclosure, Hoover's, Media General and Zacks into a comprehensive company report.

Navigation between the various modules is easy and logical. The screening flexibility is above average among Internet vendors, even stronger than most of the disk-based services. The screening editor is an ActiveX program that we were able to run on Windows-based systems using either Internet Explorer or Netscape browsers. On Mac systems, however, MSN displays a more basic Web-based screening module.

The research wizard walks an investor through the factors to consider when looking at a stock, including its fundamentals, price history, valuations, catalysts, and competition. Another unique feature is the advisor FYI alerts, which alerts users to factors that may influence a stock's price, such as an earnings estimate revision, a price-earnings ratio in the bottom 25% for its industry, and increasing relative price strength.

Microsoft has made steady improvements to its investment Web site since its introduction and the site is one of the strongest stock research and screening services on the Web.

Quicken.com

Quicken.com is a free site offering investors a central place to manage many aspects of personal finance, including banking, insurance, retirement planning, and investing. Quicken.com offers six predefined screens covering basic growth, value, momentum, and market-capitalization approaches. Results are displayed in a standard table view, but Quicken has a nice feature that allows users to switch between different views, such as financials or growth rates.

The "Full Search" screening module allows users to construct custom screens using any of 33 well-chosen elements. Users can select pre-defined ranges for each element or specify a minimum and maximum range.

The site includes all the basic tools required to research those companies passing screens, including quotes, news, portfolio tracking, company fundamentals, links to full SEC filings, insider transactions, and analyst ratings and earnings estimates. Unique features include consensus stock ratings by Quicken.com users and a stock evaluator that highlights elements affecting a company's stock price.

The site is well organized and presents information available for each stock clearly. Quicken.com's features and data exceed those found on a number of fee-based sites. Most investors will find this free site adequate for their needs.

S&P Personal Wealth

Standard & Poor's Personal Wealth is a one-stop investment center that offers financial planning, portfolio management, charting, mutual fund and stock research, and screening at a cost of \$9.95 per month, or just less than \$100 a year.

Personal Wealth provides five predefined screens as well as a stock screening tool. Both tools are tied strongly to the S&P's proprietary STARS (STock Appreciation Ranking System) rankings and other S&P valuation measures. The screening editor is basic, but covers the major elements used for screening.

The company profiles provide all of the details one would expect. The organization and display of information is well thought out. Unique elements include S&P ratings, informative company and industry write-ups, and 10 in-depth S&P Stock Reports per month.

The tools and data are solid and useful, but the information comes with a subscription charge in an era where the market is heading toward free data. The site will appeal most to investors who want easy access to S&P's well-regarded investment analysis.

StockScreener

Hoover's Inc. has grown to become a good source of company descriptions and financial data. StockScreener is a free service from Hoover's offering screening on approximately 9,000 companies.

The service includes the typical elements expected in a basic screening service. Minimum and maximum elements can be specified for 22 factors such as multiples, ratios, company size and growth rates. Screening results are displayed in a table that also shows the factors used for the screen. Company names are linked to resources such as the SEC EDGAR database for further company research. StockScreener is best suited for the investor looking to perform basic screening.

Company profiles are free to all, but Hoover's also offers a membership

that includes detailed financials for \$109.95 per year. The financial statement listing in Table 1 for StockScreener details the data provided through this subscription option.

Thomson Investors Network

Thomson Investors Network is a comprehensive investment Web site providing portfolio management, quotes, news, E-mail alerts, stock, mutual fund and muni bond data, screening tools, and even basic investment education. The site is primarily a subscription-based service costing \$34.95 per year, although certain elements, such as the stock screening, can be used for free.

The screening available on the site is weaker than most of the other online and Internet systems. For example, screening is limited to selecting six criteria from the 18 available fields, and comparisons can only be made in relative context (i.e., strong, above average, below average or weak).

Separately, Thomson provides results of basic screens such as low price-earnings companies broken down by market capitalization. As revealed in the comparison grid and table, the site is above average in terms of the data available for researching companies—exceeding company information found in most free Web sites. The site is best suited for investors looking for individual company research tools, but don't need strong screening.

TraderBot

TraderBot separates itself from the crowd by offering real-time screening of price, volume, and news. TraderBot allow its subscribers to seek out companies with price gaps, volume spikes, trades near the bid or ask, or even with or without recent news. A number of predefined screens are available including those seeking companies with a "dead cat bounce" or "gap up and held." These screens can be customized or new screens can be created from scratch. The screening system also covers more traditional elements such as price-earnings ratios and market cap.

Charts, news, and company snapshots from Media General help to examine companies passing filters.

TraderBot offers the day trader and active investor unique and helpful real-time tools. Its offerings are not as broad as some of the general-purpose investment sites, but it meets the needs of its targeted audience.

Wall Street City Pro

Wall Street City is a comprehensive investment Web site providing a wide range of data and services, everything from free portfolio tracking, news, market updates and basic search tools to a rich array of charting, screening and company research tools.

The site offers the greatest range of screening tools among the Internet sites. You can opt for a rich collection of predefined screens using both fundamental and technical approaches, or you can create and test your own screens.

Wall Street City includes a flexible and powerful Java-based screening module that covers a wide range of fundamental and technical factors. Up to 40 criteria can be combined at one time from the 700 technical and fundamental screening criteria. Criteria can be weighted to create custom company scores.

Wall Street City includes a unique backtesting feature that analyzes the historical success of a screen with various holding periods and market capitalization concentrations. Telescan tracks the performance of its predefined screens and reports on the performance of these

strategies. What's Working Now identifies the best- and worst-performing stock group and predefined stock screens. The predefined screens cover a wide range of fundamental and technical screening strategies. The predefined screens show the filters that make up the screen, a list of passing companies, historical performance charts, and statistics for the strategy.

Overall, Wall Street City is a feature- and data-rich site of interest to a wide range of investors.

Yahoo! Finance

Yahoo! Finance brings together a simple, but reasonable set of free tools for the investor. Yahoo! offers a very basic stock screening tool—users can screen on any of the seven available criteria, but are forced to pick criteria from within preset levels.

Yahoo! is able to leverage its linking expertise to bring together a reasonable collection of news and research data. Fundamental stock data comes from Market Guide, while Zacks provides earnings estimates and brokerage recommendations. Even insider transactions from Thomson are available for free, which also provides the mutual fund profiles.

Overall, Yahoo! Finance is a good site for keeping track of your portfolio and performing basic company research, but is weak for screening.

Zacks Advisor

The Zacks Advisor service offers in-

vestors a wide range of investment information and screening options.

With the service, you have access to daily E-mail alerts covering items such as analysts' changes, detailed company financials, brokerage research reports, predefined screens, and custom screening. Zacks offers 13 predefined screens that can be further broken down into market-cap ranges. Custom screening offers control over 100 variables covering the usual range of screening options, along with earnings estimates and brokerage recommendation figures not available through most services. Zacks also allows users to save custom screens for later use.

Zacks provides detailed reports on a company's financials, ratios, industry comparisons, consensus earnings estimates, and analyst recommendations. Detailed analyst estimate reports go so far as to list a record of each estimate and recommendation for a given company.

Overall, Zacks offers a wide range of useful tools for those with a stock portfolio. Screening and research is above average and the basic tools necessary to construct a stock portfolio are provided, while the portfolio management module helps keep investors abreast of their holdings.

John Bajkowski is editor of Computerized Investing and financial analysis vice president of AAIL.