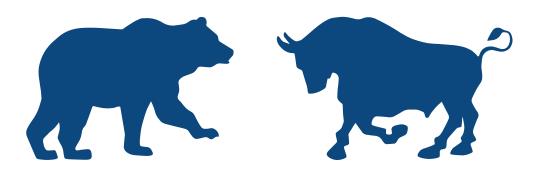


The InvesTech Research

PERSONAL PROFIT GUIDE



This valuable reference is your step-by-step guide to using InvesTech's safety-first strategy. Discover the secrets behind our proprietary indicators, how to easily use the model portfolio, our investment strategy, and much more.



625 Wisconsin Avenue Whitefish, MT 59937-2129 Website: www.investech.com Telephone: (406) 862-7777 Email: investech@investech.com

A LETTER FROM THE PRESIDENT

Dear Investor,

Successful investing in today's volatile and uncertain investment climate has become a demanding task, yet consistent profits on Wall Street have never come easy. Whether investors found themselves in the Roaring '20s, the Depressionary '30s, the Go-Go Fund '60s, the Inflationary '70s, the Tech Bubble of the '90s, or the 2008 Financial Crisis, the results have always been the same. The individuals who had the foresight and conviction to look "across the valley" or "over the peak" have been among the small minority to ride the charging bull markets... and sustain those profits when the major bear markets strike.

While most investors continue to base investment decisions on current news or media headlines, InvesTech Research uses technical and macroeconomic analysis to unemotionally look forward to the future stock market environment.

InvesTech seeks to transform the "guesswork" of investing into a more measured strategy by utilizing a sophisticated (yet easy to understand) blending of macroeconomic, monetary, and technical analysis. At first, proprietary indicators such as our Negative Leadership Composite, Pressure Factor, and Bellwether Index may sound strange and unfamiliar. However, such tools have been the key to InvesTech's safety-first strategy and track record. More importantly, investing in the stock market is a learning experience. Within a matter of months, most subscribers begin to feel at ease with the detailed analysis which has earned InvesTech its 42-year reputation as one of the nation's leading financial research firms and investment newsletter services.

Through our unique and objective research, we will strive to provide you with the vital information you need to make safe, profitable investment decisions as we travel through the uncharted waters ahead.

Cordially,

James B. Stack

President, InvesTech Research

About InvesTech Research

Based in scenic Whitefish, Montana, InvesTech Research offers a unique "safety-first" strategy to our readers located in all 50 states as well as 43 countries around the world. Through our proven proprietary models and objective analysis, InvesTech has over a 40-year history of accurately predicting market risk – telling investors when to be most bullish and when to become cautious.

InvesTech Research is over 2,200 miles away from Wall Street, and we see this distance from mainstream financial industries as a core component of our philosophy and objective

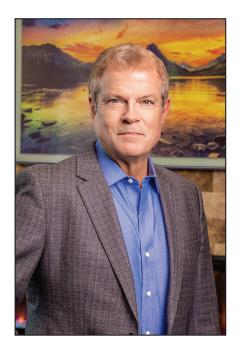


methodologies. We love our mountain view and are proud to be "Far From the Madding Crowd," allowing us to offer our readers the clear, researched, objective market analysis you rely on to inform your investment decisions.

About James Stack - President & Founder

Recognized as one of the nation's leading technical analysts, James Stack was formerly a project manager with IBM Research and has a number of domestic and international patents to his credit. After founding InvesTech Research in 1979, he began publishing the InvesTech Research newsletter in 1982. Over the years, InvesTech has earned widespread recognition for our unique analysis of the key forces behind the stock market, and for safety-first returns with an allocation strategy described by Forbes as "more or less impervious to declines."

Jim first appeared nationally on "Wall \$treet Week" with Louis Rukeyser in 1984, and became a regular guest on CNN, CNBC, Reuters, and other business and financial news programs. For over 30 years, Jim was the longest serving Guest Market Monitor on PBS's "The Nightly Business Report" – the most widely watched nightly financial news program in the country, which aired from 1979 until 2013 when it was sold to CNBC. In addition to addressing major investment conferences worldwide, Jim is often quoted in popular publications such as Barron's, The Wall Street Journal, Kiplinger, and Forbes.



About Jill Mislinski - Research Director & Senior Writer

Jill Mislinski joined the InvesTech team as Research Director and Senior Writer, bringing her experience working with market and economic indicators to the already talented team. Prior to joining InvesTech, she spent over 10 years at Advisor Perspectives, providing unbiased data and extensive analysis to a wide readership.

Jill holds a Bachelor of Science from the State University of New York in Mathematics and a Master of Science in Physical Science from the University of Chicago. Before joining Advisor Perspectives, she spent many years working in both academia and nonprofits, from research in space science to playing a major role in a start-up science outreach organization. She is excited to contribute to InvesTech's research and to apply her extensive analytical knowledge.



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Welcome to InvesTech Research

An Introduction

InvesTech was originally founded in 1979 as a private investment firm dedicated to independent research of the financial markets. Today, InvesTech maintains an extensive historical database of financial and market data extending back more than 120 years. Our proprietary indicators and data sets, along with deep historical knowledge of market cycles, permit analysis of the Federal Reserve, economy, and stock market that is virtually unparalleled on or off Wall Street. This research and analysis is made available to subscribers in real-time through our website, as well as our flagship *InvesTech Research* newsletter.

Our research offers a unique blending of technical, monetary, and macroeconomic analysis, as we attempt to answer not just where the market is heading, but why, and includes actionable equity sector and asset allocation recommendations via our Model Fund Portfolio. Through our time-tested safety-first investment philosophy, we aim to provide unhedged advice and a valuable perspective on risk management that is hard to come by today.

Frequently Asked Questions

About your Subscription...

Q. When does my subscription begin?

Your subscription will begin with the first issue published after your subscription order was received and you will be provided immediate access to the InvesTech Research website. We will also mail you an introductory package which includes a complimentary issue of the latest *InvesTech Research* newsletter.

Q. How can I tell when my subscription expires?

Subscription expirations are based on the number of newsletter issues included in your subscription term. Your expiration is the publication date of the last issue you will receive. This date is printed on your mailing envelope. You are also provided a grace period to our website after your last issue to ensure you can read it online. This date can be located in the My Account area of the InvesTech website. You will be sent a renewal notice before the expiration of your subscription.

Q. Do you process automatic renewals?

We will not process renewals automatically. You may elect to turn on automatic renewals from the "My Subscription" tab of the My Account page. If turned on, your subscription will renew at expiration automatically for the same subscription term you most recently purchased. We will send renewal notices either by mail or email prior to your expiration.

Q. What if I have questions about my subscription or problems accessing the website?

Most problems can be quickly resolved with a call to our office at (406) 862-7777 (Monday-Friday, 8:30 am-5 pm Mountain Time). You may also submit the <u>Contact Us</u> form on our website or send an email to <u>investech@investech.com</u>. Please note, due to SEC regulations, our research team is unable to answer questions about your specific investments or portfolio.

About the InvesTech Research Service...

Q. How often does InvesTech publish the InvesTech Research newsletter?

The *InvesTech Research* newsletter is published on the third Friday of each month. In December, a calendar with the dates of publication for the coming year is printed in the newsletter. The Publication Schedule is also available on the <u>InvesTech Issues</u> page of our website.

Q. What real-time updates are available online?

InvesTech Indicators and Daily Data are updated each day at market close on our website. Market Insights & Economic Trends are published weekly when pertinent data releases and economic updates become available. Additionally, changes to the Model Fund Portfolio are emailed as they occur and can also be found on our website. InvesTech Research may also communicate dynamic developments in the market and/or meaningful changes to our strategy on our InvesTech Hotlines.

Q. What indicators does InvesTech use in analyzing the market?

InvesTech utilizes over 100+ technical and fundamental indicators (monetary, economic, leadership, breadth, momentum, and sentiment) – approximately one-third of these are proprietary indicators developed through years of research. While the details of our <u>proprietary indicators</u> are confidential, we openly present their background and use their graphics in support of our analysis... often comparing current readings with the historical performance of these indicators.

Q. How should I use the Model Fund Portfolio?

The objective is to bring your portfolio into alignment with the Model Fund Portfolio's allocation as quickly as possible. However, it is important to review the "For New Subscribers" section of the Model Fund Portfolio in the current issue of InvesTech Research. NOTE: Initial recommendations regarding portfolio changes are generally announced first by email and on our website.

Q. What if the Model Fund Portfolio has a high-cash position?

Depending on the stock market outlook when you subscribe, you may indeed discover that InvesTech's Model Fund Portfolio is defensively invested in T-bills or a money market fund. This cash reserve is adjusted according to market risk and may constitute as much as 80-100% of the portfolio when risk is extreme. This reflects our "safety-first" approach to investing in the stock market – a time-tested strategy for managing risk in one's portfolio.

Q. How does InvesTech select ETFs and mutual funds to recommend?

Recommended ETFs must pass a number of criteria for selection which include prior track record, composition of the underlying portfolio, index correlation, total assets, trading liquidity, expense ratio, and the stability and experience of the sponsoring firm. Leveraged, esoteric, or infrequently traded ETFs are generally avoided.

The first criterion for mutual funds is a performance record which ranks among the top funds in the category. In addition, the fund should be no-load or low-load and have an all-in expense ratio that we deem reasonable. We also look at the fund's size, management team, top holdings, and annual portfolio turnover, among other attributes.

Q. Are you able to answer specific questions about my investments?

Unfortunately, no. Our extensive subscriber base and commitment to research only permit us to respond to general questions or requests within the newsletter. However, each piece of individual correspondence is carefully reviewed and we welcome any suggestions for improving our service.

Q. How can I get more specific information on the funds you recommend?

A substantial amount of fund research is available from services such as Morningstar. Additional ETF and mutual fund information is also generally available on the Internet at the fund family's website. It is recommended that all subscribers carefully evaluate the suitability of a fund for their own portfolio objectives and overall tolerance for risk.

Q. Can I get notified when new content is available?

Yes! Subscribers can sign up to receive emails when new InvesTech Issues, Hotlines, and Market Insights & Economic Trends are posted to the website. You can customize your email preferences to receive any combination of the three by visting the My Account area when logged in to our website.

Subscriber Resources & Tools

InvesTech Issues

The *InvesTech Research* newsletter has earned widespread recognition for its time-proven risk allocation strategy, as well as in-depth analysis of the Federal Reserve. The newsletter is published on the third Friday of each month. The newsletter is sent by mail and posted to our website for subscribers. We send email notifications to our subscribers when the latest issue is available. The official publication calendar can be found on our website on the <u>InvesTech Issues</u> page.

Market Insights & Economic Trends

Check out Market Insights & Economic Trends whenever important economic news and data is released for a short summary of what it means to you and how it may affect your investing, along with tracking of important economic indicators with up-to-date charts and data. A select few Market Insights & Economic Trends are made available to the public with the majority available only to our subscribers.

InvesTech Hotline

Updated every Friday after 12:30PM ET, the <u>InvesTech Hotline</u> provides a summary of the week's important data releases, technical updates, and any changes to the Model Fund Portfolio.

Model Fund Portfolio

The <u>InvesTech Model Fund Portfolio</u> is designed for individual investors who want to follow our allocation and sector recommendations for the equity portion of their portfolio. Subscribers who follow the Model Fund Portfolio can track the trades we're making in real-time as we implement our "safety-first" strategy. Emails are sent to subscribers notifying them of any changes to the portfolio. For assistance utilizing the InvesTech Model Fund Portfolio, see page 28.

InvesTech Indicators

InvesTech utilizes over 100+ technical and fundamental indicators (monetary, economic, leadership, breadth, momentum, and sentiment) – approximately one-third of these are proprietary indicators developed through years of research. While the details of our proprietary indicators are confidential, we openly present their background and provide subscribers the ability to follow along with real-time updates to these indicators on the InvesTech Indicators page. For in-depth history and analysis of our proprietary indicators, see page 9.

Daily Data

Daily access to a wide range of stock market metrics, including market indexes, breadth/volume data, leadership data, and short-term and proprietary indicators is provided in one convenient location. Daily Data is updated each day as soon as the information is available from our sources.

Subscriber Library

Explore the <u>Subscriber Library</u> of Special Reports and past issues on important topics of a timeless and historically significant nature. Learn more about past market cycles, asset bubbles, and important strategies for long-term investment success.

Understanding InvesTech's Indicators

An Introduction to Technical, Monetary, and Macroeconomic Analysis

The term "Technical Analysis" oftentimes conjures up visions of trendlines, oscillators, stochastics, point-and-figure charts, candlestick patterns, and Fibonacci sequences in the search to unlock the secret of the stock market. And while there are those who profess the ability to forecast the stock market using these or more esoteric tools, this picture of technical analysis and the ability to predict future stock prices is for the most part – wrong.

InvesTech Research is built on a 40+ year track record of successfully navigating some of the most treacherous markets in Wall Street history – including the 2008 Financial Crisis, the 2005 Housing Bubble, the 2000 Tech Bubble, and even the 1987 Crash. While some of the tools mentioned above can often be beneficial to short-term traders, the ability to manage risk at times of extreme danger requires a much broader and more in-depth approach that includes not only the technical health of the market, but a fundamental understanding of the importance of monetary policy, and the ability to proactively apply the most leading macroeconomic tools available.

When technical, monetary, and macroeconomic analysis are taken together, investors have a strong framework for successfully navigating every part of the market cycle. The technicals are the most leading and allow investors to act ahead of important turning points in the market. Monetary indicators then reveal whether conditions are acting as a headwind or tailwind for the market, which can impact both the size and longevity of a major move in the market. Finally, leading macroeconomic indicators are what confirm the signals being sent from the technical and monetary tools. For example, technical and monetary indicators can warn of recession well ahead of time, but it is only the macroeconomic data which can confirm that a recession is indeed inevitable. The table below shows our most relied upon indicators for each of these three areas:

InvesTech Indicators				
TECHNICAL	MONETARY	LEADING MACROECONOMIC		
Breadth Advance-Decline Line InvesTech A/D Divergence Index InvesTech Adjusted Breadth Index Breadth Thrusts Leadership InvesTech Negative Leadership Composite InvesTech Leadership Indexes Index Divergences InvesTech Gorilla Index InvesTech Bellwether Index InvesTech Bellwether Index DJUA/DJTA/Russell 2000 Sentiment InvesTech Investor Psychology Barometer AAII Individual Investor Sentiment Survey Investors Intelligence Advisor Sentiment Long-Term Conditions Coppock Guide 18-Month Relative Strength Index Short-Term Conditions InvesTech Pressure Factor CBOE Equity Put/Call Ratio	Inflation Pressures S&P Goldman Sachs Commodity Index ISM "Prices Paid" Index Median Consumer Price Index U.S. Dollar Index Inflation Forecasting Models FIBER Leading Inflation Index NY Fed Underlying Inflation Gauge ECRI Future Inflation Gauge Fed Policy Discount Rate 90-Day T-Bills 2-Year T-Note Long-Term Yields 10-year Treasury Bonds 30-year Mortgage Rate High Yield Credit Spreads Yield Curve Fed Yield Spread Model Percent of Yield Curve Inverted	Employment Jobless Claims Job Openings Consumer Confidence - "Jobs Plentiful" Housing InvesTech Housing [Bubble] Barometer New Home Sales Existing Home Sales NAHB Builder Confidence NAHB Traffic of Prospective Buyers Housing Starts Building Permits Housing Prices vs. Inflation Confidence CEO Confidence Consumer Confidence Consumer Sentiment NFIB Small Business Optimism Debt and Leverage Margin Debt Leading Economic U.S. Leading Economic Index ECRI Weekly Leading Index ISM Manufacturing Index		

Every indicator listed on the previous page has proven to have a positive impact on our investment process, yet over 40 years of investing experience has taught us that there is no single Holy Grail indicator. Instead, it's the weight of the evidence of <u>all</u> of these indicators which gives the best opportunity for investing success. Next, we will show how these indicators form the basis of a "safety-first" strategy which both protects against major stock market drawdowns while also capitalizing on low-risk buying opportunities once they appear.

The InvesTech Bellwether Index

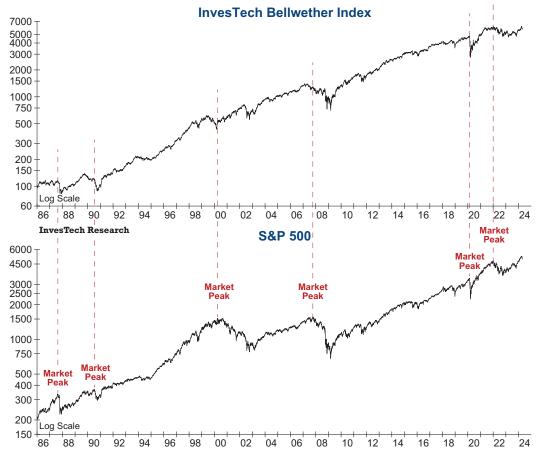
...measuring bellwether leadership

Historically, there are certain bellwether stocks, and even entire sectors, that have characteristically led the broad market averages at major market tops. At different times over past decades, these have included stocks like General Motors, IBM, and GE. Yet it is primarily three economically- and monetarily-sensitive sectors –Consumer Discretionary, Financials, and Utilities– that have earned the right to be called true historic bellwethers today.

In the later stages of a bull market, the Federal Reserve will typically tighten monetary policy as the economy starts to overheat, with the result being that the interest rate-sensitive Financial and Utilities sectors begin to weaken. At the same time, higher interest rates curb borrowing and investment spending. And as the economy slows, consumers cut back on purchases of Consumer Discretionary items such as cars, restaurants, and entertainment. Hence, these three economically-sensitive sectors will often signal an early warning flag prior to the start of a bear market.

The InvesTech Bellwether Index is designed to forewarn investors that they should start battening down the hatches in anticipation of a market turning point. To compile this Index, we pulled some of the longest-trading and most leading stocks from these three economically- and monetarily-sensitive sectors. Selection emphasis was given to companies that were well capitalized and which displayed a cyclical price pattern that peaked well before previous bull market tops.

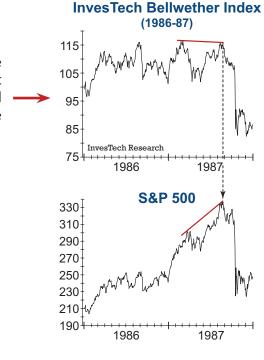
As shown in this long-term graph of our *InvesTech Bellwether Index* (below), weakness in this Index has tended to foreshadow the subsequent bear markets at least several months in advance.



Stepping back in history to four important market peaks since the mid-1980s, we see how this Index would have warned of imminent trouble...

The 1987 Crash

As the stock market rose sharply in the summer of 1987, the S&P 500 Index (bottom graph at right) gained over 10% in just 4 months. In contrast, the *InvesTech Bellwether Index* struggled just to stay even – sending an important warning that these bellwether stocks were signaling trouble.



InvesTech Bellwether Index (1998-2002)400-InvesTech Research

&P 500

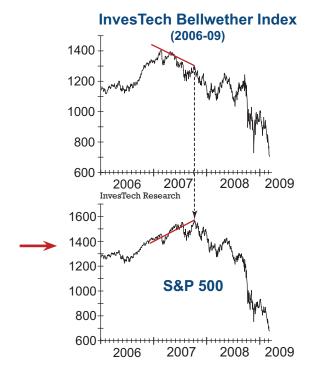
The 2000-02 Bear Market

All of the major stock market averages peaked in the first three months of 2000 at all-time record highs. However, the *InvesTech Bellwether Index* had already hit its peak over 12 months earlier and had declined by almost 20%!

NOTE: Although these bellwether stocks did not continue declining in 2000-01, they had nonetheless already given their all-important warning signal. And with interest rate-sensitive stocks making up part of this *Bellwether Index*, it's one reason why it should not be used during bear markets or at market bottoms. *Its exclusive purpose is to help identify market tops*.

The 2007-09 Bear Market

Almost 8 months of advance deterioration in the *InvesTech Bellwether Index* during the summer of 2007 was yet another ominous warning flag of a potential bear market ahead. Instead of looking at corporate earnings, media headlines, and "no recession" reassurances from economists, this is what investors should have been watching!

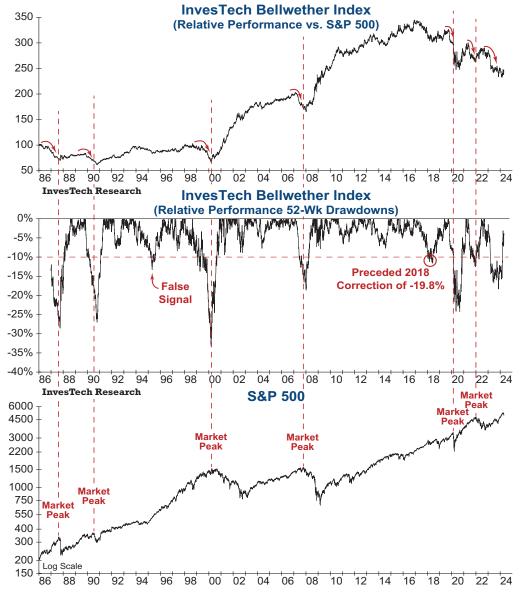


Bellwether Stocks and Relative Performance

While divergences in the *InvesTech Bellwether Index* on an absolute basis have proven useful for identifying market tops, there is also value in tracking this Index on a relative basis. Historically speaking, the *InvesTech Bellwether Index* has underperformed the S&P 500 by at least -10% on a 52-week basis prior to every bear market since its inception (see middle graph below). As such, this signal likely carries strategic consequences when breached.

Tracking the relative performance of the *InvesTech Bellwether Index* serves two purposes. First, it gives a defined threshold to tell you that bellwether underperformance has become significant enough to warrant defensive action. While the lead times provided by this signal can vary, knowing that the *InvesTech Bellwether Index* has broken the -10% barrier on a relative basis provides an investor with a definitive and actionable bearish warning flag. Second, monitoring this leading index on a relative basis provides a much-needed signal for times when the *InvesTech Bellwether Index* is not diverging on an absolute basis. For example, bellwether stocks significantly underperformed the S&P 500 prior to both the -19.8% correction in 2018 and the -33.9% COVID-19 Crash in 2020, yet the *InvesTech Bellwether Index* was still making new highs on an absolute basis in the lead up to both instances.

Used alongside other technical and monetary indicators, the *InvesTech Bellwether Index* deserves close attention when it noticeably underperforms the popular market indexes.



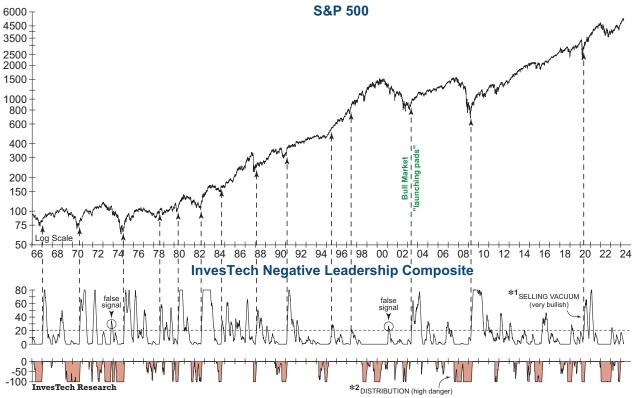
The Negative Leadership Composite (NLC)

...measuring the real quality of internal leadership

Why should one pay attention to leadership? Two reasons. First, leadership is easily measured. And second, broad leadership is a prerequisite for a bull OR a bear market. The biggest, multi-year bull markets have the most bullish leadership. Conversely, the big bear markets must have very negative leadership. Many other indicators, such as valuation and sentiment gauges, are more subjective and imprecise. That is, they never peak at the same level twice. In addition, both sentiment and valuation are "counter-trend" – meaning that once a market top is in place and stock prices start falling in a bear market, these indicators immediately begin to improve by moving toward more favorable readings. In other words, if you're not already defensive, these counter-trend indicators will keep you invested all the way down.

In researching various leadership indicators, we found little value in attempting to quantify leadership in blue chip stocks versus secondary stocks, or in NYSE versus Nasdaq stocks. In addition, we also discovered that tracking upside leadership (the number of stocks hitting new yearly highs) failed to differentiate between a temporary correction and a full-fledged bear market. The real quality of leadership analysis lay somewhere else...

QUESTION: What is the most difficult decision that an investor must make? If you answered "when to sell a stock," you're at least partially correct. Every investor inevitably learns that the most difficult decision is actually "when to sell a stock at a loss." Emotions can easily overwhelm judgment. And there isn't a seasoned investor alive who hasn't held at least one stock all the way down, as he waited and hoped for that one chance to get out even.



[*1 SELLING VACUUM [-BULLISH-]: This confirms the absence of negative or downside leadership. It is normally a very bullish signal since a stock market without any downside leadership is destined to move much higher.

[*2 DISTRIBUTION [-BEARISH-]: This signals that investors are anxious to sell stocks regardless of whether their position is at a loss, or the stock market is tumbling to new lows. It carries bearish implications as it suggests investors will use any rallies to get out of the market.

With time, logic replaces emotion. So selling a stock at a loss becomes a little more mechanical (if not less painful) for the experienced investor. Nonetheless, it often requires a pretty grim market outlook for the majority of investors to "bite the bullet" and dump a stock that is tumbling to new 12-month lows. Therein lies one of the most valuable technical tools in the stock market: downside leadership – or the number of stocks hitting new yearly lows. Shown in the graph on the previous page is the S&P 500, plus the two components of our Negative Leadership Composite or NLC. Both parts of our NLC are based purely on downside leadership. Together, they're designed to signal the onset of a new major bull market, which is often when investor gloom is most widespread. And perhaps more importantly, they reveal when the probability of a full-scale, portfolio-slaughtering bear market is highest.

The top half of our NLC [*1] monitors the absence of selling pressure or what we call a "Selling Vacuum." No new bull market springs to life without seeing downside leadership dry up – with the appearance of this Selling Vacuum. More often than not, the height and duration of this Selling Vacuum help indicate how strong a new bull market is – and how long it will last. For example, look at the times this Index climbed to a very strong +60 to +70 reading. Almost invariably, they confirmed the onset of a new multi-year bull market.

The bottom half of our NLC [*2 – shaded region] measures "Distribution" by looking at the rate of acceleration in downside leadership. Quite simply, when the shaded region appears, it means that investors have reached that "bite-the-bullet" stage and are anxious to dump their stocks – even if at a big loss. This is the most vulnerable, dangerous region for the stock market... it is when bear markets can strike.

Obviously, this Negative Leadership Composite doesn't provide a major signal very often. When Distribution (shaded region) is present, it's time to be more cautious and carry a higher cash reserve. But when a Selling Vacuum appears (especially after 6 or more months of Distribution), it's time to take notice and get ready to jump on a charging new bull market in stocks. Of course, the decision to aggressively buy at that time should be confirmed by other technical and monetary indicators tracked by InvesTech.

The A/D Divergence Index

...measuring long-term breadth divergence

Stock market "breadth" or participation has always been a most valuable tool at market tops. As stocks reach overpriced levels (and inflation fears appear or interest rates begin to rise), it's common to see investors become more selective in their stock purchases.

The A-D Line (cumulative total of daily advancing issues minus declining issues) is the most prevalent tool in monitoring breadth. To use this tool, one must visually compare the line's divergence with the graph of a market index such as the S&P 500, and accurate measurement can be difficult. Additionally, the A-D Line can display an upward or downward bias depending on the period.

In developing InvesTech's A/D Divergence Index, we tried to expand on previous research done by others in the area of market breadth. Yet our goals for the model were very specific:

- It should provide confirmation of a probable bull market when underlying breadth is broad and strong.
- It should reveal when breadth divergence is reaching a critical point at which past bear markets have normally begun.
- It should not be distorted by "temporary" weakness or strength in the A-D Line.

In technical terms, first we adjusted the 75+ years of A-D Line data for the increasing number of stocks traded over time. Next, we normalized the S&P 500 Index so current price changes are comparable to

historical price changes. And finally, through linear regression, we found the relationship that was most consistent in past bull markets. The end result is a model that reveals the percent difference between the actual S&P 500 Index in a bull market... and the "expected" S&P 500 Index based on historical breadth. That difference or divergence, when it reached a certain level, was

an excellent warning of an impending bear market.



1968

1969

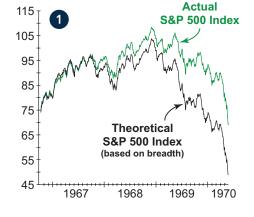
1970

70

Log Scale

1967

Technical jargon aside, here are the results – shown by example. Figure 1 at right shows the S&P 500

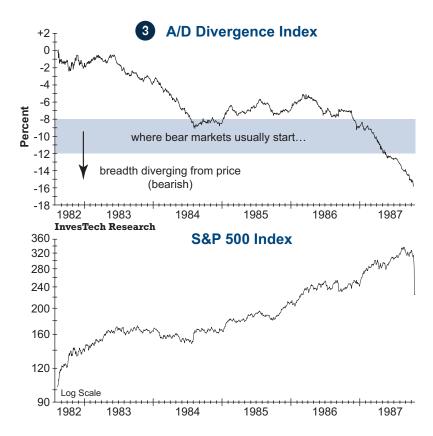


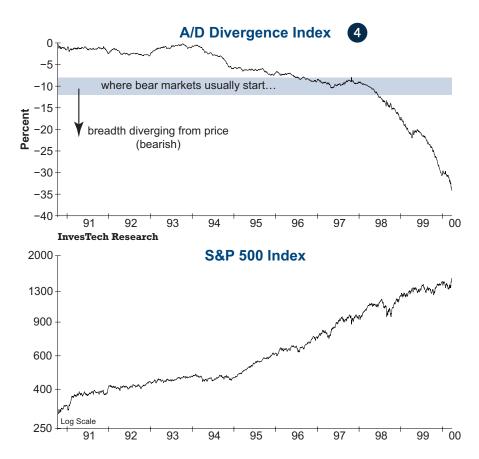
Index as the "Go-Go Fund" era of the late 1960s gave way to the 1969-70 Bear Market. Also displayed is our "Theoretical S&P 500 Index" (or where the S&P 500 should have been based on market breadth). You'll notice that by the time the bear market started, a substantial gap existed between these two lines or indexes. As the bear market progressed, this spread opened even wider... increasing the downside risk. Quite simply, that gap measured how much the market's breadth was leading prices lower.

To display this divergence in a more understandable form, we've shown it (as percent difference) in our A/D Divergence Index – Figure 2 at left. As with a surprising majority of bear markets, the "danger zone" of this Index turned out to be between 8-12%. The more that breadth weakened in the bear market, the faster this Index declined, and the faster the market fell.

In Figure 3 at right, we've shown our A/D Divergence Index for the 1982-87 Bull Market (and subsequent crash). From mid-1983 until mid-'84, deteriorating breadth caused problems for the market as the technology-heavy NASDAQ dropped over -30%. But note that this A/D Divergence Index then moved higher (strengthened) for several years... until 1987. The warning before the '87 Crash was a classic!

How has this gauge performed in other benchmark periods? Remarkably, it did work in 1929... with one of the greatest breadth divergences in history. And entering the 1950s, the A/D Divergence actually showed the S&P 500 Index as 20% underpriced by 1951. That bullish condition remained throughout most of the decade... with the A/D Divergence rising as stocks marched profitably higher.





Finally, we come to the greatest breadth divergence in the modern era, the Tech Bubble - Figure 4. Market breadth had deteriorated worrisome levels just the Tech Bubble was starting to get nutty in 1997, yet the market continued to advance on increasingly weaker breadth until its ultimate peak in 2000. Unsurprisingly, this gargantuan breadth divergence resulted in a bear market that lasted over 21/2 years, with losses that approached -50% in the S&P 500 and -80% in the NASDAQ.

Thus, another important lesson to be taken from this tool is that the larger the divergence, the more painful the eventual bear market is likely to be.

Coppock Guide

...identifying the safest buying opportunities

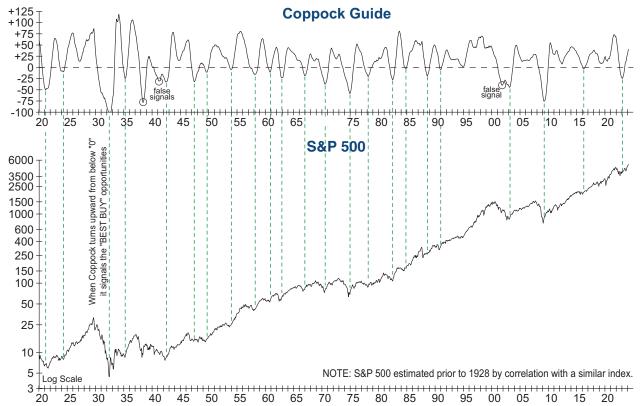
The Coppock Guide or Curve was originally developed over 60 years ago by Edwin S. Coppock. It's been modified and adapted by a few analysts since then, but the only notable publicity it receives is an occasional mention in a timely *Barron's* article or from independent, technically-oriented newsletters. Yet this indicator has a remarkable 100+ year track record when it comes to signaling the start of a new bull market for stocks. And it is one of the few technical tools that would have kept anxious investors from stepping **prematurely** into the middle of the 1929-32 record stock market decline.

The Coppock Guide has been described as a "barometer of the market's emotional state." This indicator moves very slowly and methodically from one emotional extreme to another. Its historical value lies in signaling or confirming the best, low risk buying opportunities in history. All of these are noted by the dashed lines to the S&P 500 Index in the graph below.

By calculation, this Index is actually the 10-month weighted moving total of a 14-month rate of change plus an 11-month rate of change of a market index. In other words, it's really just a momentum oscillator. Because of this, it reverses direction when the momentum or rate of change in the market peaks. And since market bottoms are usually sudden or "spiked" reversals, the Coppock Guide works amazingly well in triggering buy signals.

After dropping to 0 or below, a mere 2-point upturn in this Index can usually be treated as an excellent buying opportunity. And often, the more negative the Coppock Guide is when it turns upward, the more impressive the profits ahead. The only false signals under this guideline were in 1938, 1941, and November 2001.

However, the Coppock Guide has never been noted for timely sell signals. The reason is that market tops are usually slow, rounding formations in which momentum (and the Coppock) peak up to a year or more ahead of the market. So other technical or monetary tools must be used to gauge when to reduce



exposure and shift to a higher cash reserve... except, that is, in a few cases. And that's where the carnage comes in, as explained below.

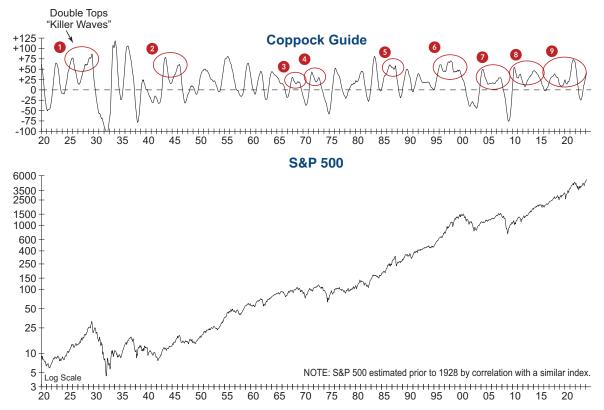
In the late 1960s, a technician named Don Hahn observed another phenomenon about the Coppock Guide. When a double-top occurs without the Coppock falling to 0, it identifies a bull market that hasn't experienced any normal, healthy washouts or corrections. That's a runaway bull market usually headed for disaster. This double-top has occurred only 9 times in the past 100+ years – with 5 of them accompanying the start of the most notorious bear markets of the past century: 1929, 1969, 1973, 2000, and 2007.

So one historical aspect of this double-top: *They can result in <u>nasty bears!</u>* Looking at the 9 "Killer Waves" of the past century, the table at right shows the month of the second peak, along with the timing of the start of the S&P 500 bear market. And a glance at those resulting bear market losses

Coppock Guide			
2nd Peak " <u>Killer Wave</u> "	Start of S&P 500 Bear	Bear <u>Market Loss</u>	
① Oct 1929	Sept 7, 1929	-86.2%	
2 May 1946	May 29, 1946	-28.8%	
3 Feb 1969	Nov 29, 1968	-36.1%	
4 Jan 1973	Jan 11, 1973	-48.2%	
5 Sep 1987	Aug 25, 1987	-33.5%	
6 Apr 1998	Mar 24, 2000	-49.1%	
Jul 2007	Oct 9, 2007	-56.8%	
8 Feb 2014	May 21, 2015*	-14.2%*	
Aug 2021	Jan 3, 2022	-25.4%	
*Market Correction		rosToch Posoarch	

InvesTech Research

reveals why the double-top in the Coppock Guide has been nicknamed a "Killer Wave." The average decline (excluding the -86% loss in 1929) was almost -40%!



In summary, there are two critical lessons in this model. First is the inherent danger that accompanies a double-top in the Coppock Guide. Such a formation often precedes the biggest and most devastating bear markets. The second lesson, and perhaps most important, is the knowledge that the safest and most profitable buying opportunities appear after this Guide declines to (or below) 0 and then turns upward.

With its remarkable track record, the Coppock Guide should be a key tool in any investment strategy. When used with our other indicators, it can provide the discipline and patience to avoid treacherous bear market rallies and wait for the best buying opportunities that occur only a couple times each decade.

Short-Term Indicator – The Pressure Factor

Market psychology tends to roll in waves... a wave of euphoria followed by a wave of pessimism... overconfidence followed by fear. As a result, markets advance (or decline) in a volatile manner as they bounce between "overbought" and "oversold" levels. Both investors and traders are easily swept along in these buying or selling panics, only to find themselves jumping in near a short-term peak or selling right at a short-term bottom.

An "overbought" market condition can be defined as stock prices having climbed too far, too fast, with too much volume flowing into too few stocks. In simple terms, the more overbought a market becomes, the higher the probability that it will level off to digest its recent rise, or even correct downward – giving back a portion of its gain. The opposite is true for an oversold market.

Obviously, an investor could increase their profit potential by determining when these sentiment swings reach an excessive level. For example, someone desiring to buy stocks (or exit a short position) can likely buy at a lower, more favorable price if the market is not overbought... or better yet, waiting until the market is oversold. Over the years, a number of methods have been used to measure the degree that a market becomes overbought or oversold. One of the most common is the Short-Term Trading Index or TRIN – defined as the Advance/Decline Ratio divided by the Advancing/Declining Volume Ratio.

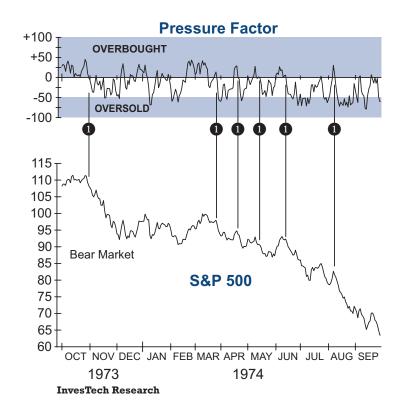
InvesTech's proprietary Pressure Factor (PF) is an index which utilizes three individual oscillators: an inverse variation of the TRIN, a volume oscillator, and a price oscillator to determine when the market is overbought or oversold on a short-term basis. Because the Pressure Factor moves about a neutral 0-axis, the indicator is termed an oscillator.

Under NORMAL market conditions, as the Pressure Factor climbs above a certain level, the market becomes overbought; the higher the PF, the more overbought and the higher the probability that the market is about to stall or correct downward. Conversely, as the PF drops below a certain level, the market

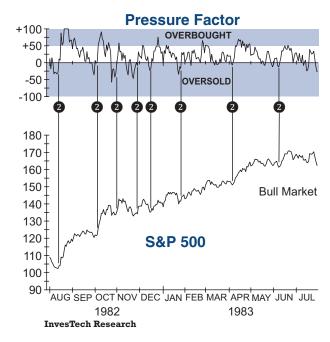
becomes oversold; the lower the PF, the more oversold.

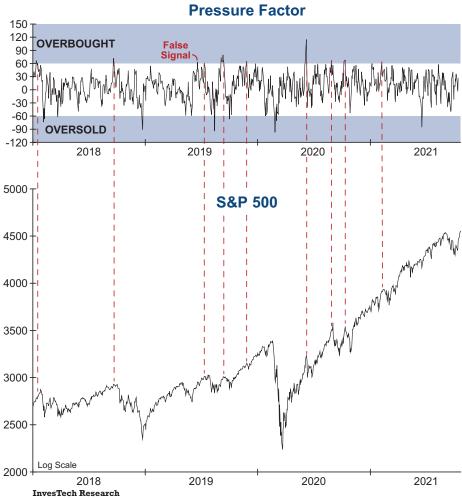
Shown at right is a graph of this Pressure Factor versus the S&P 500 during the protracted 1973-74 Bear Market. Notice that traders were presented the best opportunities for adding to short positions as the PF fell out of the overbought region – marked by 1.

The infamous bull market of 1982-83 was exactly the opposite, as the oversold region provided the optimum entry points for purchasing stocks [2] next page]. In addition, whenever the PF jumped to an overbought level, investors were normally better off waiting to add to long positions (purchase stocks) until after the PF dipped to neutral or into the oversold area.



You will also notice the overbought/oversold regions have been shifted downward in a bear market (such as the 1973-74 example) and shifted upward in a bull market (1982-83 example). This leaves the obvious question: "How do we determine when to shift the levels?" Previously, the shifting was based on monetary policy - upward if the Federal Reserve was accommodative, downward if they were tightening. An alternative to shifting the shaded levels is to mathematically adjust the Pressure Factor itself. This is automatically done by InvesTech today, with the shaded overbought/oversold thresholds for moderate readings fixed at +30 and -30 and +60 and -60 for extreme readings.





As shown in the graph at left, moderate Pressure Factor readings carry very near-term market implications and are useful for making tactical trades. On the other hand, extreme PF readings occur far less frequently and typically more meaningful carry consequences. Α prime example of this was when the PF reached the most overbought level in 30 years following the 2020 Covid Crash. During the next three days, the S&P 500 lost -7.2%, including a single-day loss of -5.9%!

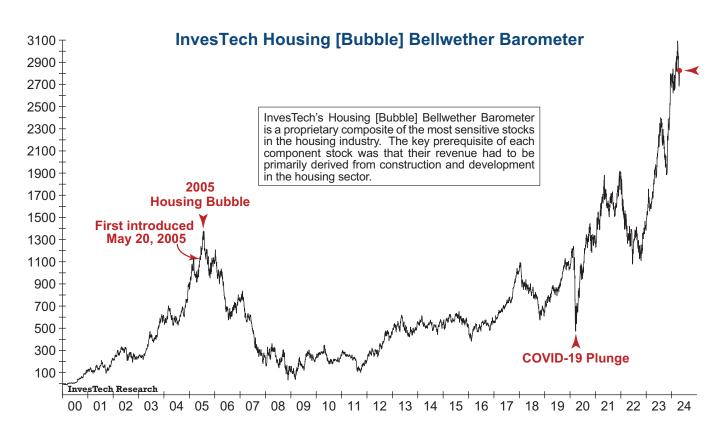
Since markets can remain extremely overbought/oversold for a period of time, the PF should be used as a trigger when it *exits* these regions. In other words... **the time to purchase stocks is not when the PF enters the oversold region, but rather after it bottoms and exits the oversold region**. Conversely, the time to sell a stock is when the PF peaks and exits the overbought region.

InvesTech Housing [Bubble] Bellwether Barometer

Housing is a crucial area of the market for investors to follow due to the outsized impact that it has on the consumer and economy. Changes in the housing market are typically wide-reaching and can reverberate for many years – even though it only accounts for approximately 17% of U.S. GDP. For this reason, we debuted our InvesTech Housing [Bubble] Bellwether Barometer in May of 2005 as we recognized that the housing market was in a bubble that was at risk of popping.

Our Housing [Bubble] Bellwether Barometer was developed to track the most sensitive stocks related to the U.S. housing industry – such as leading homebuilders, mortgage financers, and related stocks. This Barometer turned sharply lower just a few months after its debut in mid-2005, which was a potent warning that the housing market was skating on thin ice. Housing prices peaked just three months later, in what would ultimately lead to the 2008 Financial Crisis and the deepest bear market since the Great Depression. Housing prices wouldn't return to new highs for another 11 years.

While excesses in the housing market continued to unwind until home prices eventually bottomed in 2012, extremely accommodative monetary policies from the Federal Reserve helped housing prices bounce back to new highs by 2016. After the COVID-19 pandemic hit, housing prices went ballistic, rising at the fastest pace on record thanks to trillions of dollars in stimulus and rock-bottom interest rates. Our analysis indicated that the U.S. housing market had once again reached bubble status, a view which was further corroborated by our Housing Bellwether Barometer surpassing its high from the 2005 housing bubble. However, it wasn't long before this Barometer fell dramatically and the housing market headed into a significant slowdown. Due to the critical impact of the housing market on the U.S. economy, our Housing [Bubble] Barometer remains an important tool for gauging the level of potential risk in the housing market.



InvesTech Canary (in the coal mine) Index

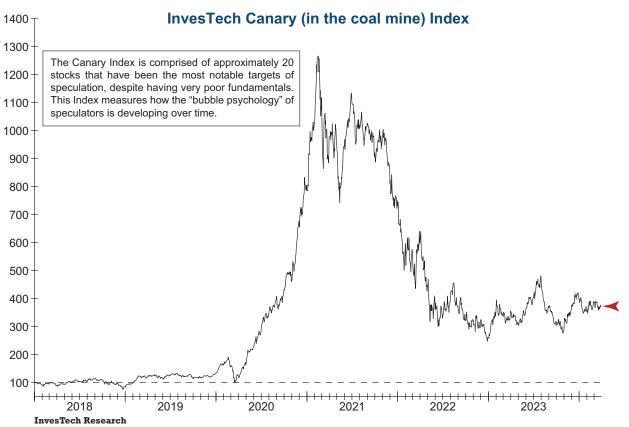
When a bubble in asset prices develops, one of the most reliable signs that the party is coming to an end occurs when the hottest and most speculative stocks begin to suffer significant losses. Simply put, the darlings of investor speculation are typically the first to unwind when investor sentiment and risk appetite begin to shift.

That was what we originally recognized in the Tech Bubble of the late '90s, when the dot-com stocks contained within the Interactive Week Internet Index plunged by -42% in the Spring of 2000, while the S&P 500 had only declined by -10% at that point. The carnage that struck these fundamentally unsound and epically overvalued stocks was the warning shot across the bow that indicated what was to come: a 2½ year-long bear market that would see the S&P 500 lose nearly -50% and the Internet Index lose over -90%!

In 2020, a very similar frenzy was ignited in speculative "meme" stocks as a result of trillions of dollars in pandemic-related monetary and fiscal stimulus. For this reason, we introduced our InvesTech Canary (in the coal mine) Index in May of 2021 as a tool that would provide an early warning signal of the danger in the stock market – just as miners used to carry a canary to warn of dangerous gases when descending into a coal mine in the early 1900s.

We designed our Canary Index to contain 20 of the hottest, most speculative, and most overvalued stocks of that speculative mania – including hot initial public offerings (IPOs), special purpose acquisition companies (SPACs), so-called "story stocks," and other favorites of the speculative crowd. Despite their seemingly limitless valuations, most of these companies never turned a profit and many never will.

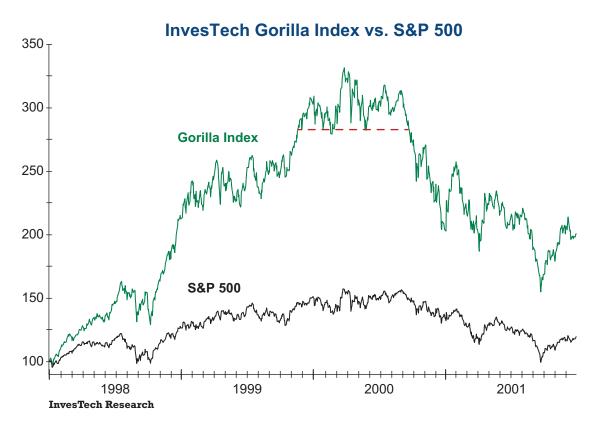
Just like the Internet Index in 2000, our Canary Index gave an early warning that investor psychology was unwinding prior to the arrival of a bear market in the blue chip averages. While its primary purpose has already been served, the Canary Index is still useful as we track the long and painful reversal of speculative psychology.



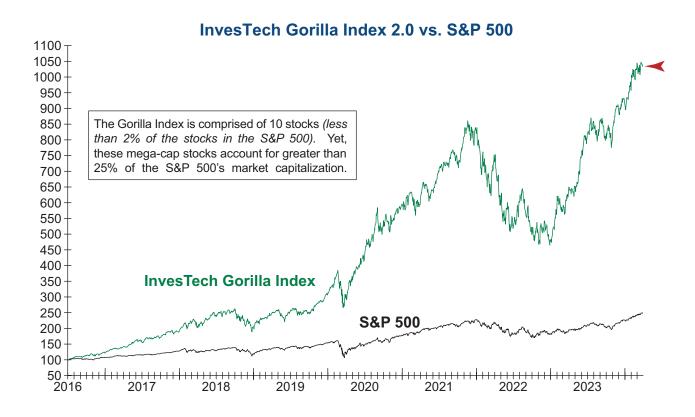
InvesTech Gorilla Index

One of the defining features of the Tech Bubble was the market's growing reliance on a very small number of megacap stocks. Companies like AOL, General Electric, Lucent, Microsoft, and MCI Worldcom had become viewed as the winners of the new "high-tech" era and their share prices were bid up to stratospheric levels as a result. Recognizing that so few stocks were having an outsized impact on the S&P 500 Index, we originally created the InvesTech Gorilla Index in 1999 to track the performance of these critical stocks and monitor the concentration risk in the broad index.

In total, the 17 stocks that comprised our Gorilla Index represented less than 3% of the stocks in the S&P 500 Index, yet accounted for over 25% of the Index's capitalization weighting. More importantly, this basket of stocks contributed to almost 60% of the S&P 500's gains in the final 18 months of the Tech Bubble. When it was introduced in the final year of that bull market, we said, "A bear [market] won't have control until the Wall Street favorites in this Gorilla Index roll over." Indeed, it marked the first major down leg of the 2000-2002 bear market when our Gorilla Index broke under its long-term support level (see graph below).



After the COVID-19 pandemic struck, there was a similar resurgence of megacap dominance in the S&P 500 Index, and this time it was *even more* pronounced. Thus, we introduced the InvesTech Gorilla 2.0 Index. The new Gorilla Index is made up of only 10 stocks, yet its weighting in the S&P 500 was even greater than the original at 27%. Without revealing all of the components in this tool, a few of its megacap growth holdings include Facebook, Tesla, Google, and Nvidia.



These stocks continued to dominate the market until late 2021, when our Gorilla Index peaked and began negatively diverging six weeks prior to the January 2022 peak in the S&P 500. We continue to watch this indicator closely, as our Gorilla Index has resurged to speculative highs.

Using the InvesTech Research Model Fund Portfolio

An Introduction

In today's volatile markets, a long-term investor is jokingly described as "an individual who holds onto a new purchase long enough to receive his next brokerage statement in the mail." However, history has proven that the true long-term investor, who aims for a one year holding period or longer, is typically rewarded by the most consistent capital growth from the stock market.

InvesTech uses a number of proprietary indicators to monitor the long-term "health" of the market which you've read about in the previous section. Among these are our Negative Leadership Composite, Pressure Factor, and InvesTech Bellwether Index. When our technical tools are universally bullish, we will recommend an aggressive long position and have up to 100% of our Model Fund Portfolio invested in the ETFs or mutual funds listed in the newsletter. As key indicators deteriorate, we will shift allocation to more conservative sectors and funds and/or reduce the percentage invested in the market by cutting back on positions in more cyclical sectors.

Even if you invest in stocks or funds other than the funds recommended by InvesTech, you should still reduce holdings when advised. By doing so, you reduce exposure as the market enters a more vulnerable stage. And more importantly, by the time a bear market strikes, a substantial portion of your investment portfolio should be safely in T-bills or a money market fund.

The Model Fund Portfolio Construction

Our Model Fund Portfolio is constructed as described above by specifying the allocation percentage in each exchange-traded fund (ETF) or mutual fund, with the remainder in T-bills or a money market fund. This portfolio focuses primarily on sector ETFs. However, we may also incorporate ETFs and mutual funds in the portfolio that are not specifically sector related, such as international funds, small-cap funds, or an inverse index fund when warranted. If mutual funds are held in the portfolio, we will generally list an ETF alternative for the position.

In selecting ETFs we focus on funds with solid track records that have demonstrated a close correlation with the sector or category index that we want to target. For instance, if we are establishing a position in small-cap stocks, we might seek an ETF that has tracked the performance of the Russell 2000 Index very closely over the past ten years. We also look at how the fund's portfolio is constructed, the level of assets in the fund, the expense ratio, and the reputation and experience of the fund's sponsor.

Selection of mutual funds is based on objective, size, ease of access, and performance – with an emphasis on the 5-year and 12-month rates of return. After all, when you purchase a mutual fund, you're actually buying the skill, knowledge, and track record of the management team running that fund. Specialty funds such as gold and bear market funds are recommended only if we see an opportunity for profit or the need to provide a hedge for our long positions.

How to Use the InvesTech Research Model Fund Portfolio

The InvesTech Model Portfolio is designed for individual investors who want to follow our allocation and sector recommendations for the equity/fund portion of their portfolio. The following information will assist you in getting started with InvesTech. It involves the decisions that must be made by an investor who wishes to bring their portfolio allocation more into alignment with InvesTech's strategy:

- 1) **Determine your current invested allocation** by totaling the amounts you have invested in equities (individual stocks, stock mutual funds, and ETFs). Divide this by your total equity portfolio size. This is your percent invested allocation.
- 2) Refer to the InvesTech "percent" invested recommendation and allocations listed in the Model Fund Portfolio. If you are holding a portfolio that is similar in composition, sector weighting, and percent invested allocation to what we are currently recommending in the Model Fund Portfolio, it is unnecessary to make any changes at this time. Just wait for InvesTech's next recommendation, announced on the Model Fund Portfolio page of our website, to either add new positions or take profits... and act accordingly with your own holdings.
- 3) Adjust your portfolio, if necessary. Purchases after our initial recommendations must be made at your discretion; however, if your portfolio mix is dramatically different from our current recommendations and sector weightings, you may wish to consider changes to more closely align the portfolio with our model. For example, check your mutual funds for their weightings in each sector. If the combination of your stocks, ETFs, and mutual funds give your portfolio significantly more or less exposure to a particular sector or category (such as international or small-cap) than we recommend, you may wish to adjust your holdings to bring them more in line with our recommendations.

An exception to Step 3 above would be if we warn in the *InvesTech Research* newsletter or on our <u>Model Fund Portfolio</u> page against new purchases in a particular area. This usually means that we believe sector leadership is changing or most of the profits on a position have already been achieved and new investment would not be advisable. In that case, it is better to wait in the safety of a money market fund for our next recommendation. Depending on market conditions, we may advise bringing your portfolio in line with our recommendations by phasing into the market. Please review the Model Fund Portfolio published in the current newsletter or the "New Subscribers and Our Portfolio" section of the <u>Model Fund Portfolio</u> page for more information.

Remember, InvesTech's strategy is not a short-term market timing system, but a long-term "risk allocation" strategy based on highly sophisticated indicators. Our objective is NOT to try to forecast stock movements in advance, but to correctly assess the market environment. When market indicators point to a strong, low-risk buying opportunity, we will recommend an aggressively invested position and growth oriented sectors. Conversely, we will inform you when our indicators show risk has risen to an unacceptable level so that you can take steps to protect your portfolio. This risk-averse strategy will help you to preserve capital in times of market vulnerability so that you will be ready and able to take advantage of the next low-risk buying opportunity when it arrives.

IMPORTANT DISCLOSURE INFORMATION: Past performance may not be indicative of future results. Different types of investments involve varying degrees of risk. Therefore, it should not be assumed that future performance of any specific investment or investment strategy (including the investments and/or investment strategy recommended and/or undertaken by InvesTech) will be profitable, equal any historical performance level(s), be suitable for your portfolio or individual situation, or prove successful. Please see additional **IMPORTANT DISCLOSURE INFORMATION** at www.investech.com.



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