Pursuing the Art and Science of Investment Management
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ABOUT HARMAN

WE TAKE PRIDE IN...

...being an independent wealth management firm.

...helping clients through some of life’s most difficult challenges: investment management and advanced planning.

...working for the best interest of our clients.

Disclosure:
Neither asset allocation or diversification guarantee a profit nor protect against a low in a declining market. They are methods used to help manage investment risk.
We help risk-averse investors capture growth when risk is relatively low, and move to a more protected position when risk is elevated.

ELEVATING VIRTUES

CLARITY
Sound investments start with a clear and coherent understanding of the investing environment.

ALIGNMENT
Prudent investing requires congruence with the forces that shape investment returns.

FORESIGHT
Managing opportunity rests on understanding where you stand and anticipating what’s next.

INTEGRITY
We practice a noble profession. We aim to do the rights things, the right way, for the right reasons.

TRUST
Honesty and dependability build the foundation for long-term successful relationships.

COMMITMENT
Achieving one’s goals requires a committed process that builds in diligence and discipline.

We assist and guide our clients through some of life’s most important events.
Flaws Exposed in Asset Allocation Theory

Failure of Equity Diversification.
Failure of tactical strategies.
Limitations of "buy and hold.”
Incompatibility with investor emotions.

Established Investment Structure In-house

Developed Models.
Developed Best Practices for Investment Mgmt.
Begin implementing evidence-based strategies.

Launched Alphalytics Research

Independent macro-economics research firm.
Subscription-based deliverables to professional community across the country.

Win By Not Losing

Harman Publishes Thoughts on Misaligned Portfolio Theory

Buy and hold investing is overused and misapplied.
For many investors, greater risk controls are needed.
Better risk controls can lead to better outcomes.

Quantifying Risk Through the Cycle

Sought objective measures of risk apart from emotions.
Sought to measure risk associated with the economy.
OUR COMMITMENT TO INVESTMENT MANAGEMENT

PROCESS MATTERS

Investment outcomes are the result of dedicated resources and sound processes. We are committed to practices designed to lead to strong investment management outcomes.

OUR DISCIPLINE

- Monthly "Investment Committee" meetings dedicated to review and accountability of portfolio performance.
- Stringent awareness of portfolio holdings and performance trends.
- Performance assessments are routinely conducted to measure our contribution to performance versus benchmarks.
- We conduct original, comprehensive research for monthly evaluation and review of factors driving global markets.
- Clients are consulted and guided by well-defined, goals-based financial plans.

OUR INDEPENDENCE AND OBJECTIVITY

- We acquire research data from primary sources, untainted by un-objective Wall Street economists.
- Assess and review data in long-term historical context.
- Provide limited access to wholesaling professionals to exclude undue influence to our processes and prevent conflict of interest.

EVIDENCE-BASED APPROACH

- We make "metrics-based" decisions, reviewing targeted characteristics and performance.
- Apply business cycle framework for pursuing opportunity and managing long-term risk.
- Utilize empirically supported equity strategies for targeted return exposures.
- Our investment philosophy is grounded on empirical research covering over four and one-half decades of modern markets.

COST MANAGEMENT

- We lean on index-based equity strategies for efficient, low-expense exposures to asset classes.
- Utilize lower cost institutional mutual funds.
- We express sensitivity to tax positions within portfolios and provide proactive counselling on options.
- We factor cost basis into position changes.
## OUR INVESTMENT CONVICTIONS

We’ve assessed numerous assumptions in the investment management process to assist our clients in reaching long-term outcomes.

<table>
<thead>
<tr>
<th>How We Think</th>
<th>Processes We Believe In</th>
<th>Outcomes We Focus On</th>
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<tbody>
<tr>
<td>The Primacy of the Business Cycle</td>
<td>Adaptive Business Cycle Investing</td>
<td>Full Cycle Returns</td>
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<tr>
<td>Independent Research and Analysis</td>
<td>Beta Targeting</td>
<td>Managing Recessionary Declines</td>
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<td>Disciplined Analytics</td>
<td>Risk Aware Diversification</td>
<td>Positioning for Opportunity</td>
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<td>Evidence-Based Decisions</td>
<td>Factor-Based Investing</td>
<td></td>
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<tr>
<td>Behavioral Portfolio Theory</td>
<td>Systematic Risk Control</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Intelligent Risk Control (Optimization)</td>
<td></td>
</tr>
</tbody>
</table>
KEY CONCEPTS IN PORTFOLIO MANAGEMENT:

- Primacy of the Business Cycle
- Adaptive Investing
- Strategy of Strategies
- Intelligent Risk Controls
The **Business Cycle** is the recurrent process of economic expansion followed by economic contraction (i.e. “recession”).
THE SIGNIFICANCE OF RECESSIONS

A **Recession** is a:

- Pronounced
- Pervasive
- Persistent
- Decline in Output
- Decline in Employment
- Decline in Income
- Decline in Sales

(according to National Bureau of Economic Research (NBER) guidelines)

There have been 33 recessions identified since 1857.

Duration gap between S&P 500® cycle peaks and NBER recession announcements.

- 13.3 MONTHS
- 4.9 MONTHS Recession Start
- 8.4 MONTHS Time after recession starts for NBER to make an official “call.”

Disclosure:
The Standard & Poor’s 500 (S&P 500) is an unmanaged group of securities considered to be representative of the stock market in general. It is a market value weighted index with each stock's weight in the index proportionate to its market value. Past performance is no guarantee of future results.
The average recessionary decline is both steep and long.

-36%  
Average peak-to-trough price drawdown in the S&P 500 during recessions since 1969.

15.8  
Average duration of peak-to-trough price declines in the S&P 500 during recessions since 1969.

Traditional notions of equity diversification have not mitigated declines.

Last Three Recessionary Declines: Average Decline Per Benchmark

<table>
<thead>
<tr>
<th>Benchmark</th>
<th>Average Decline</th>
</tr>
</thead>
<tbody>
<tr>
<td>US Large Cap</td>
<td>-41.8%</td>
</tr>
<tr>
<td>US Small Cap</td>
<td>-46.7%</td>
</tr>
<tr>
<td>Foreign Developed</td>
<td>-49.8%</td>
</tr>
<tr>
<td>Emerging Markets</td>
<td>-50.2%</td>
</tr>
</tbody>
</table>

(Source: S&P Dow Jones Indices, NBER)

Past performance is no guarantee of future results. Investing involves risk including the loss of principal.
The average calendar year rate of return in the S&P 500 total return index when the outcome is positive.

Markets and Economic Growth are Directionally Consistent
Recessions, historically, have coincided with large market drawdowns.

Only 10% of the last 50 years.

9 negative years have been anchored to a recession the year before, the year of, or the year following.

Past performance is no guarantee of future results. Investing involves risk including the loss of principal.
An **Expansion** is a:

Period of economic growth between cyclical troughs and peaks.

(according to NBER guidelines)

A larger economy leads to a larger corporate sector, as captured through revenues and earnings.

The average length of expansions has grown since the evolution of central banking.

Past performance is no guarantee of future results. Investing involves risk including the loss of principal.
THE NEED FOR ADAPTIVE INVESTING

The Lessons of Market History

While static portfolios position for long term average returns, they can sit out of favor for unreasonably long periods of time.

Past performance is no guarantee of future results. Investing involves risk including the loss of principal.
What is necessary for a prudent diversified portfolio?

Portfolio “best practices” have been guilty of chasing returns based on what just worked in the prior period. They avoided asking the question, “Why?”

Unfortunately, the ingredients to a prudent portfolio are constantly changing.

The 1980’s started simple:
- U.S. Stocks
- U.S. Bonds

The 1990’s included international:
- International Stocks
- High Yield Bonds

The 2000’s added “Real Assets”
- Real Assets/Commodities

The 2010’s added “Alternative Strategies”
- Alternative Strategies

Diversification does not guarantee a profit or protect against a loss in a declining market. It is a method used to help manage investment risk.
**THE STRATEGY OF STRATEGIES**

**Fundamental to portfolio strategy is understanding this:** There is no “one best portfolio” through all conditions. Instead, we believe portfolios must adapt to the relevant “return drivers.”

History shows key economic factors that can assist or impede returns.

### What's Driving Returns?

<table>
<thead>
<tr>
<th>Asset Class</th>
<th>U.S. Stocks</th>
<th>High Quality U.S. Bonds</th>
<th>International Stocks</th>
<th>High Yield Bonds</th>
<th>Real Assets</th>
<th>Alternative Strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Factors that Drive Returns</strong></td>
<td>• Economic Growth • Low Inflation • Strong Dollar • Easy Credit</td>
<td>• High Starting Yields • Falling rate environment • Low Inflation • Strong Dollar</td>
<td>• Falling Dollar • Strong Comparative Growth</td>
<td>• High Starting Yields • Early Stage Credit Cycle</td>
<td>• Falling Dollar • Commodity Supply Imbalances</td>
<td>• High Cash Rates • Declining Economic Growth</td>
</tr>
<tr>
<td><strong>Impediments to Returns</strong></td>
<td>• High Inflation • Falling U.S. Dollar • Declining Growth</td>
<td>• Low Starting Yields • Rising Rate Policy • High Inflation • Falling Dollar</td>
<td>• Rising Dollar • Low Comparative Growth</td>
<td>• Low Starting Yields • High Internal Prices • Fear of Credit Risk • Late Stage Credit Cycle</td>
<td>• Strong Dollar • Commodity Over-supply</td>
<td>• Bullish Stock Growth • Low Cash Rates</td>
</tr>
</tbody>
</table>

Our allocation process starts with measuring economic factors first, before selecting asset classes.
THE STRATEGY OF STRATEGIES

Portfolio composition should be condition dependent – able to adapt when underlying return drivers change.

Where does the economy stand with...

- The Business Cycle Stage
- Federal Reserve Policy
- The U.S. Dollar Trend
- Supply/Demand Dynamics of Global Commodities
- Inflationary Pressure

Portfolio composition should be condition dependent – able to adapt when underlying return drivers change.
RISK CONTROL
The method by which firms evaluate potential losses and take action to manage such threats.

Lessons from Behavioral Finance

Objective Risk Controls
Rules-Based, Measurable, Algorithmic

Subjective Risk Controls
Flawed by emotions, cognitive biases, and logical fallacies.

“Trend-following” is one type of Objective Risk Control. A type of trend-following system would look to technical indicators to determine market exit and entry points.

S&P 500 with the 200-Day Simple Moving Average Trendline

Source: S&P Dow Jones Indices LLC

Past performance is no guarantee of future results. Investing involves risk including the loss of principal.
INTELLIGENT RISK CONTROLS

A system whereby economic risk is considered before applying objective risk controls.

- Economic Risk Score
- Objective Risk Controls

Intelligent Risk Control

An Illustration of Intelligent Risk Control

Guggenheim Directional Allocation Index Vs. S&P 500® Index
Calculated by S&P Dow Jones Indices

Using a form of Intelligent Risk Controls

Using a form of Intelligent Risk Controls

12.7% 7.15%

10 Yr. Annualized Rate of Return

Index performance numbers are as of April, 30, 2017.

*The Guggenheim Directional Allocation Index evaluates the 6-month moving average of the Conference Board Leading Economic Index first as an economic assessment. It then examines the 250 day simple moving average of the Dow Jones U.S. Large-Cap Total Stock Market Index.

Past performance is no guarantee of future results. Investing involves risk including the loss of principal.
FOUR SOURCES OF VALUE FROM A PORTFOLIO MANAGER

As asset manager, there are four key areas that can provide long-term value to our clients’ investments.

1. RISK MANAGEMENT
   - Mitigating systemic risk.
   - Staying invested through expansions.
   - Diversifying sources of risk.

2. ASSET ALLOCATION
   - Choosing asset classes.
   - Diversifying sources of return.

3. ASSET SELECTION
   - Empirically based methods for capturing returns.
   - Matching upside/downside profile with investor objectives.

4. MANAGING COSTS
   - Manage internal fund expenses. Pay for value.
   - Trade on a tax-aware and efficient basis.

Neither asset allocation or diversification guarantee a profit nor protect against a low in a declining market. They are methods used to help manage investment risk.
PORTFOLIO MANAGEMENT

ADDING VALUE IN ASSET MANAGEMENT

- Risk Management
  - Economic Monitoring
  - Disciplined Analytics
  - Economic Risk Scoring
- Asset Allocation
  - Beta Targeting
  - Cycle Staging
  - Risk Based Diversification
- Asset Selection
  - Evidence-Based Investing
  - Factor-Based Equity
  - Cycle-Driven Fixed Income
- Minimizing Costs
  - Value of Fund Fees
  - Tax-Efficient Funds
  - Tax-Aware Trading
OUR COMMITMENT TO RISK MANAGEMENT

Understanding Systemic Risk

Investment outcomes are the result of dedicated resources and sound processes. We are committed to practices designed to lead to strong investment management outcomes.

Economic Monitoring

We conduct independent and objective research from primary sources. Our scope includes both cyclical and structural dynamics, making sense of the key forces shaping markets.

Disciplined Analytics

We conduct disciplined analytics, reviewing data in its most relevant time, scale, place, and context to help think probabilistically about market outcomes.

Economic Risk Scoring

Systemic risk to the economy is quantitatively scored to ensure a dependable, objective evaluation. We compare present conditions to those of the last sixty years.
Understanding Information

The world is flooded with information but lacking in knowledge. At Harman, we interpret data in the context of the broader system – enabling our ability to track changes as the economy evolves.
Understanding Risk Detection

Risk is more than a feeling. We emphasize quantitative assessment of economic risk. On a monthly basis, the U.S. economy is profiled and compared to the last sixty years.
The sound practice of analytics can transform data into insightful intelligence. We are committed to evaluating historical data in its appropriate time, place, scale, and context.

**Yearly Return, Russell 1000 Total Return Index when ESRI is above 70**
Count by whole figure – Daily; Dec. 1982 to Present

US Large Cap Stocks

- **Positive Outcome** 93% When ESRI >70
- 93% of Returns Greater Than 0%
- 17.9% Avg. 12 Month Return

Source: Harman Wealth Management LLC, FTSE Russell.

Past performance is no guarantee of future results. Investing involves risk including the loss of principal.
For Harman, managing portfolios is a comprehensive exercise. We evaluate returns expectations in light of business cycle staging, exposures to risk, and what would happen in both up and downside scenarios.

Beta Targeting

Beta measures the sensitivity to the market’s ups and downs. Before selecting investments, we consider this sensitivity, aligning it with portfolio objectives.

Cycle Staging

Investible assets perform differently under each stage of an expansion. We put this research to work in order to form a blueprint for investing through a market cycle.

Risk Aware Diversification

Assets can be sensitive to various global risk factors. We measure risk exposures first before allocating to portfolios.

Asset Allocation does not guarantee a profit or protect against a loss in a declining market. It is a method used to help manage investment risk.
Beta Targeting

We believe market exposure should be congruent with investor goals. Therefore, we assess the overall sensitivity of the stock holdings, ensuring they match (1) the objectives of the investor and (2) the opportunity in the market.
Cycle Staging

The economy experiences common characteristics throughout the successive stages of the business cycle. Tracking these stages and characteristics provides deep insight into opportunities and risks.
Cycle Staging allows us to build a blueprint for asset strategies based upon how they have historically performed throughout the expansionary cycle.

<table>
<thead>
<tr>
<th>Equity Asset Class</th>
<th>Recovery</th>
<th>Mid Cycle</th>
<th>Late Cycle</th>
<th>Recession</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Small (size)</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Hi Beta</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Large/Cap Weighted</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Momentum (Growth)</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Sector Rotation</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Quality</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Low Volatility</td>
<td>No</td>
<td>-</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Defensive Sectors</td>
<td>-</td>
<td>-</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>High Dividend</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Yes</td>
</tr>
<tr>
<td>Currency Dependent</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Foreign Stocks</td>
<td>Yes/No</td>
<td>-</td>
<td>-</td>
<td>No</td>
</tr>
<tr>
<td>Real Asset-Based</td>
<td>Yes/No</td>
<td>-</td>
<td>-</td>
<td>No</td>
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<tr>
<td>Consumption</td>
<td>Yes/No</td>
<td>-</td>
<td>-</td>
<td>No</td>
</tr>
<tr>
<td>Opportunistic</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deep Value</td>
<td>Yes</td>
<td>Yes</td>
<td>-</td>
<td>No</td>
</tr>
<tr>
<td>Small (size)</td>
<td>Yes</td>
<td>Yes</td>
<td>-</td>
<td>No</td>
</tr>
<tr>
<td>Inflation Dependent</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Energy/Utilities</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes/No</td>
</tr>
<tr>
<td>Real Estate</td>
<td>-</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Alternatives</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Managed Futures</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Volatility Hedging</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
</tbody>
</table>

We’ve inventoried over 30 asset class indexes with historical records to 1972, offering five full cycles of data.
The objective of diversification is to manage the overall risk exposure of the portfolio. Therefore, we conduct a disciplined risk analysis before allocating to various asset classes and strategies.

Diversification does not guarantee a profit or protect against a loss in a declining market. It is a method used to help manage investment risk.
Empirical research has made significant insights into the effectiveness of fund types. We are grounded in our approach in order to align clients with the best thinking in fund selection.

**Understanding The Science of Fund Choice**

- **Evidence-Based Investing**
  - Research has demonstrated the success of index-based equity strategies vs. active managers.

- **Factor-Based Investing**
  - Empirical support has identified five factor premia – areas of the market that can produce returns above market cap-weighted indexes.

- **Cycle-Based Fixed Income**
  - Patterns in the lending cycle can reveal how opportunity and risk sequentially evolve. We adapt fixed income allocations based on this cycle.

A benchmark index is not actively managed, does not have a defined investment objective, and does not incur fees or expenses. You cannot invest directly in a benchmark index.
Understanding Factor Investing

Empirical studies have shown long-term outperformance of certain stock “factors.” Thus, factor-based indexes offer very targeted, low-cost exposures to key areas in the market to assist portfolio returns.
Factor Investing Across the Business Cycle

Like all stock categories, factors fall in and out of favor. Factor indexes have allowed us to assess factor performance across business cycle stages and for more than forty years.
Understanding The Impact of Costs

Minimizing portfolio friction can be an important part to achieving solid long-term returns. We are committed to managing costs with sensible practices to support investment outcomes.

- **Pay for Value on Fund Fees**
  Cost is important but not everything. Higher fees without delivered value can erode portfolio returns.

- **Use Tax-Efficient Funds**
  ETFs can reduce the taxable distributions generated by internal turnover in normal equity mutual funds.

- **Conduct Tax-Aware Trading**
  Investing for long-term capital gains can help reduce the impact of taxes. Our tax-sensitive approach factors into decisions affecting buys, holds, and sells.
How We Represent You

Our Clients

Business Affiliates

- Administers regulatory oversight based on authority from FINRA & SEC.
- Conducts annual audits & practice reviews.
- Aligns us with technology for recordkeeping & trading.
- Conducts due diligence on all products.

- Independent 3rd party holder of all accounts.
  - Executes trades.
  - Issues monthly statements.
  - Facilitates online account access.
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This information does not constitute an offer to sell or a solicitation of an offer to buy securities, nor shall there be any sale of securities, in any state or jurisdiction in which such an offer, solicitation or sale would be unlawful.

Past performance is no guarantee of future results. The investment return and principal value of an investment will fluctuate so that an investor's shares, when redeemed, may be worth more or less than their original cost. Current performance may be lower or higher than the performance quoted.

Rebalancing can entail transaction costs and tax consequences that should be considered when determining a rebalancing strategy.

Small capitalization securities involve greater issuer risk than larger capitalization securities, and the markets for such securities may be more volatile and less liquid. Specifically, small capitalization companies may be subject to more volatile market movements than securities of larger, more established companies, both because the securities typically are graded in lower volume and because the issuers typically are more subject to changes in earnings and prospects.

Investing internationally carries additional risks such as differences in financial reporting, currency exchange risk, as well as economic and political risk unique to the specific country. This may result in greater share price volatility. Shares, when sold, may be worth more or less than their original cost.

Investments in emerging markets may be more volatile and less liquid than investing in developed markets and may involve exposure to economic structures that are generally less diverse and mature and to political systems which have less stability than those of more developed countries.

Alternative investments, including hedge funds, commodities, and managed futures involve a high degree of risk, often engage in leveraging and other speculative investments practices that may increase risk of investment loss, can be highly illiquid, are not required to provide periodic pricing or valuation information to investors, may involve complex tax structures and delays in distributing important tax information, are subject to the same regulatory requirements as mutual funds, often charge higher fees which may offset any trading profits, and in many cases the underlying investments are not transparent and are known only to the investment manager. The performance of alternative investments can be volatile. There is often no secondary market for an investor's interest in alternative investments and none is expected to develop. There may be restrictions on transferring interests in any alternative investment. Alternative investment products often execute a substantial portion of their trades on non-US exchanges. Investing in foreign markets may entail risks that differ from those associated with investments in the US markets. Additionally, alternative investments often entail commodity trading which can involve substantial risk of loss.

Please consider the investment objectives, risks, charges, and expenses carefully before investing in Mutual Funds or ETFs. The prospectus, which contains this and other information about the investment company, can be obtained directly from the Fund Company or your financial professional. Be sure to read the prospectus carefully before deciding whether to invest.