

## About the Cambyses Electric and Autonomous Vehicle Initiative's (EAVI's) Portfolios and Models

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Cambyses EAV Initiative – Portfolio Models  
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# Preliminary Observations, Cautions, Caveats, and Disclosures

## The Portfolio Models

Cambyses' (CFA's) EAVI Portfolios and Models are intended to simplify investors' selection and design of EAV industry portfolios based on common portfolio design models. They do not represent a recommendation to buy or sell any security or construct any portfolio without consulting your Financial Advisor.

The portfolio designs are not, in their present form, suitable for predictive modeling or analysis of either performance or risk of the portfolios and models they represent. Hence, in their present form, they are also not suitable to optimize portfolio performance or risk.

The models and the data used to compose them reflect Cambyses' preference for longer-term buy-and-monitor investment strategies. The resulting portfolio weights may not be appropriate for short-term investors or more dynamic investment strategies.

## The Securities

[The securities selected for Cambyses' EAVI Database](#), Portfolios, and Models are, almost without exception, high risk investments.

### *Immature Companies*

Pure-play EAV Manufacturing companies are, generally speaking, immature – having been operated and publicly traded for only a short time.

Many EAV Manufacturers are pre-revenue or have generated only token sales as of November 2021. An equally significant number of the companies have little or no history of production at scale. Hence, their history provides no performance signals about their ability to produce and market profitably at scale. Cambyses expects that a disproportionate number of the companies in our database will fail to reach commercial viability or will cease to conduct business activities in their present form in the next three years.

The Companies' minimal trade and financial history renders both technical and fundamental analysis of their stocks' prognosis problematic. As a direct result, analysts' projections (including our own) are often less than completely reliable. By way of disclosure and for reference: CFA's analysis is generally less optimistic than other analysts' consensus, while remaining enthusiastic.

Because many of the Database Companies are immature, pre-revenue, and/or pre-production at scale they are critically dependent on their continued ability to raise capital. This, in turn implies that those companies are critically dependent on their ability to anticipate and satisfy primary-investors' needs and demands. That ability is, by no means, assured (and in many cases, remains untested). Some companies may already have reached the outskirts of investor tolerance.<sup>1</sup>

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<sup>1</sup> Several recent supplementary offers, notably NIO and RIDE, have been less than fully successful.

Share prices of EAV Manufacturing Companies and their Suppliers are extraordinarily volatile, and often trade at extreme Price-to-Earnings (P/E) ratios – If, indeed, a meaningful P/E can even be computed. The securities are (individually and collectively) 1.3 to 2.5 times as volatile as the S&P 500. Individual securities may exhibit volatility that exceeds every security in the S&P 500 Index. P/E ratios in excess of 1,200 have been noted. P/E ratios in the low hundreds (200-300) are common. By comparison, Average P/E for each of the S&P 500's segments range from ~13 (Financial Segment) to ~38 (Real Estate).

It would be easy to conclude from these observations that EAV securities are “overpriced” and due for a fall. An alternative interpretation (to which CFA subscribes) is that early investors price-in their mid-term profit-growth expectations, hence valuing the company shares at higher prices than their current profitability would command. (This has implications for CFA's industry model – that we discuss in other materials.)

### ***Lack of Diversification***

The EAV Initiative Portfolios are not diversified. Narrow selection criteria based on the company's focus on EAV Manufacturing and the EAV Manufacturing supply chain does not foster or permit segment or sector diversification or allocation between asset classes (stocks, bonds, options, etc.). Generally speaking, diversification-allocation reduces portfolio risk – while lack of diversification-allocation increases risk. CFA's EAV Portfolios Risk and Volatility are not (consciously) mitigated by incorporating uncorrelated securities or other risk reduction strategies into any portfolio.

### ***Consumer and End-User Acceptance***

In addition to the EAV Manufacturing companies' financial and operational immaturity, the public market for their product is immature. Electric Vehicle market penetration in the U.S stands at around 3%. Penetration is somewhat higher in China (~5-6%) and Europe (possibly as high as 10%). Elsewhere, penetration is 1.5 – 1.8%.

Consumer and end user acceptance of EVs is increasing (logarithmically in some markets). In the US, the EAV market is still dominated by early adopters and those who enjoy the “cool factor” associated with cutting edge technologies. To continue expanding, the market must reach a broader cross section of the buying public – possibly through offers of lower cost and lower life-cost options.

### ***Increasing Competition from Traditional Auto Makers***

The securities in CFA's EAV Initiative are Electric Vehicle “pure-plays.” Those pure-play efforts face increasing competition from traditional automotive manufacturers. As we go to press (August 2021), we are following fourteen traditional manufacturers who have initiated EAV development and marketing programs. We are certain there will be more by the next time we update (about three months from now).

EVs are, with one or two exceptions, an insubstantial part of traditional manufacturers' current output (approximately 2% by several estimates). That, however, will change. With one exception (Mazda) the traditional manufacturers we are tracking estimate that EV's will be 25-40% of their total sales by 2030. At least two traditional manufacturers (Audi and GM) indicate they will entirely phase out gas- and diesel-powered vehicles by 2035.

Traditional manufacturers (with the exception of Toyota Motors) are late to the EAV party. However, they possess formidable assets and pre-existing infrastructure that many pure-play EAV

Manufacturers are still developing. Thus, traditional manufacturers' capacity – particularly their ability to offer a broad spectrum of consumer choice – may overwhelm the weakest pure-play manufacturers in our Initiative.

Side Note – Cambyses Financial Advisors' EAV Initiative does not, at present, include traditional auto manufacturers. We hope, by November 2021, to roll out a second portfolio series that tracks and analyses this subgroup. Conclusions we draw from that analysis may be deferred until the subgroup's EAV output is both better identified in their financial plans-reports and a significant contributor to their total output. At this time, neither of those conditions is fulfilled.

### ***Infrastructure – A Pre-condition for EAV Market Growth***

Infrastructure, or the lack thereof, imposes significant constraints on public acceptance of EAV vehicles. At present, EAVs have limited range before they require recharge. Home charging stations are common. However, consumer refueling stations are few and far between. In the US, there are (as of February 2021) about 40,600 charging stations (supporting 93,000 Outlets) – almost a third of which are in California. China has a somewhat higher number – consistent with broader adoption of EVs. Lack of a common outlet standard further reduces availability (or forces consumers to purchase adapters). In addition to scarcity, recharge methods are often slow.

The infrastructure deficiency for other power modalities – e.g., green hydrogen and hydrogen fuel cell systems – is even more aggravated. Apart from commercial facilities maintained by early adaptors (primarily last-mile applications), there is practically no U.S. hydrogen infrastructure, at this time.

The commercialization of EVs marks a “shift from a fuel-intensive to a material-intensive energy system.” A private transportation system dominated by electric vehicles raises several dilemmas:

- Some battery components batteries are scarce, expensive, and/or sourcing is dominated by very few, sometimes politically charged, alternatives.
- Other components are problematic because mining them imposes harsh toxicity, environmental, and social costs.
- At present, battery recycling technology is primitive, inefficient (due to design characteristics that may be best addressed up-front by manufacturers), and unable to compete with the price of fresh-mined materials.

Lithium, Cobalt, and Rare Earth politics play a pivotal role in these conversations.<sup>2</sup>

China and Europe have instituted subsidized Cell recycling programs. The U.S. has not yet proposed regulations or subsidy policies beyond existing legislation that treats batteries as hazardous waste that must be safely disposed of.

From an infrastructure investment standpoint, timing may be as important as selecting the correct company: Invest in a pioneer, there may be too few potential customers for commercial operations; Invest too late, the company's potential may already have been priced into their securities.

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<sup>2</sup> As of November 2021, China (or Chinese entities) controls approximately 80% of rare earth reserves, extraction, and processing.

## Risk and Suitability

Cambyes does not provide a generalized Buy, Hold, Sell recommendation. Rather, we examine each security in light of its compatibility with a specific investor's risk profile, aims and goals for their portfolio, intended strategy, time horizon and several other criteria. For full information on any security that we cover, request our suitability analysis for that company.

Almost without exception, the securities in Cambyes' EAV Initiative portfolio are suitable only for investors with high risk tolerance. Most of the securities are 1.5 to 2.5 times as volatile as the S&P 500 (Measured by Beta). The securities are, in addition, moderately correlated to each other and to the S&P Index. Thus, Cambyes portfolios are only minimally less volatile than their constituent securities. Their general movement mirrors that of the S&P 500 index.

A significant number of the Initiative companies face significant financial risks. A superficial balance sheet review might conclude that the companies are quite solvent (current Ratios of 2.0-5.0 are common) and largely debt free (though that is changing). That impression is, however, misleading. Many of the same companies are pre-revenue or have not produced at scale. Thus, replenishment or maintenance of their reserves is almost entirely dependent on retaining an enthusiastic and deep-pocket investor base that isn't concerned with dilution. Those investors, historically, have been few and far between and their willingness to stay-the-course has been limited.

The Initiative Companies' volatility and financial risk influences their suitability for inclusion in virtually any portfolio – Cambyes' included. As a general rule: Initiative securities are suitable for inclusion in portfolios with either:

Very short planning horizons or hold expectations ("day trade" portfolios), or  
Long-term growth portfolios based on buy-and-monitor practices.

With almost equal generality, Initiative securities are not suitable for

Target and Target-Deadline portfolios (e.g., pre-retirement portfolios, or education savings)  
Preservation or value strategies, or (in all likelihood)  
Mid-term holding approaches

Suitable prospects for option trading and other strategies must be identified on a case-by-case basis.

## Performance Data and Analysis

Data for Cambyes' EAV Initiative is derived from public sources we believe to be reliable, including our custodians' quote services. We supplement our analysis of this data by reference to other analysts' work product and to compilation services such Thomson Reuters Stock Reports. No security we reference is covered by each and all of the analysts we reference. For any given security, we may cross reference as few as one, and as many as forty analysts and services. Our qualitative and event analysis is based on available news feeds and companies' press services. Please read our Research Disclosure regarding our reliance on third party data and analyses.

Our data, analysis, and presentations are updated at least once each calendar quarter. However, subsequent events that occur prior to each succeeding update may not be reflected in our published product. We strongly advise users of our data to note the publication date for our publication and adjust

their expectations with respect to subsequent events that affect the securities' value and suitability for your investment purposes.

Many of our analyses present “forward-looking information or statements.” These forward-looking statements involve known and unknown risks, uncertainties and other factors which may cause actual results, performance, or achievements to be materially different from our expected future results, performance, or achievements. Please see our Forward-Looking Statements Disclosure for more information on this subject.

The Initiative's short history, the EAV industry's immaturity, and the rate of change-development of the underlying technologies mandate that our conclusions remain tentative. Specifically:

We do not believe there is sufficient data or history to advocate on behalf of particular portfolio strategies. At this time, the analysis we present is not intended for use in a predictive model nor applicable to portfolio optimization. To the extent we make such predictions, they apply solely to individual securities, not to portfolios. As additional data becomes available and the EAV industry matures, we may alter this policy.

## Securities Selection

All Cambyses EAV portfolio models are developed from a selection of public companies that we have identified as operating predominantly in the Electric and Autonomous Vehicle Manufacturing industry, its supply chain, or distribution network, and a small number of vehicle end users that have indicated a commitment to adopt Electric or Autonomous Vehicles for their transportation needs. The narrow selection criteria do not permit segment or sector diversification or allocation between asset classes (stocks, bonds, options, etc.). We do not (consciously) mitigate risk and volatility by integrating uncorrelated securities or other risk reduction strategies in any portfolio.

At present, Cambyses securities database consists solely of publicly traded equity securities. All securities are presumed to be purchased and sold at market on the date of analysis. Cambyses portfolio designs employ no options, or option related strategies. Margin may be used minimally and selectively to assure that all hypothetical buying programs can be fully executed.

The initial portfolio for each allocation model was based on a fixed dollar amount. Portfolios are rebalanced and newly identified companies that meet Cambyses inclusion criteria receive allocations based on the portfolio definition (see Allocation Models, below) once each calendar quarter.

With the exception of Historical Market Trend and Projected Performance Portfolios (see below) each portfolio allocation includes at least one share of each security in our selected Dataset.

Securities that have experienced historical losses over the preceding year are excluded from Historical Market Trend portfolios. Securities that analysts anticipate will experience value loss over the next year are excluded from Projected Performance portfolios. Historical Performance and Analyst Projections are updated once each quarter.

At present, passive income (dividends) and operating expenses (management fees and margin interest, if any) are not included in either the model definition or performance summaries.

## Allocation Models (Portfolios)

### Price Weighted Portfolios (2)

The Price Weighted Portfolio apportions the current value of the portfolio based on the per share price at close on the date of the analysis of securities included in the portfolio:

$$W(i) = P(i) / \sum_1^n P(j), i \& j = 1, n \text{ and}$$
$$\text{Beta Adjusted Weights: } W(i) = \{P(i) / \beta(i)\} / \sum_1^n \{P(j) / \beta(j)\}, i \& j = 1, n$$

Where:

$W(i)$  = Portfolio Weight of Security(i),  $i = 1, n$

$P(j)$  = Price per Share of Security(j)

$\beta(j)$  = relative volatility of Security(j) (Vs. S&P 500 index)

$n$  = The number of securities in the model portfolio

Under this allocation model, higher priced securities receive greater investments of the portfolio assets. This approach is similar to the weighting concept used by the Dow 30 Index. High priced stocks (e.g., Tesla [TSLA], and Coherent [COHR]) exert an outsized influence on the portfolio's performance. At present, TSLA (34%) AND COHR (12%) account for approximately 46% of the value and performance of our Price Weighted Portfolio.

### Equal \$ Weighted Portfolio

The Equal \$ Weighted Portfolio apportions the current value of the portfolio based solely on the number of securities included in the model at close on the date of the analysis:

$$W(i) = 1 / n, i = 1, n$$

Where:

$W(i)$  = Portfolio Weight of Security(i)

$n$  = The number of securities in the model portfolio

Under this allocation model each security is allocated an equal dollar value on the date the portfolio is rebalanced. The value of the security immediately before rebalancing reflects market performance of the security during the holding period.

### Market Capital Weighted Portfolios (2)

The Market Capital Weighted Portfolio apportions the current value of the portfolio based on the Market Capitalization of securities included in the model at close on the date of the analysis:

$$W(i) = M(i) / \sum_1^n M(j), i \& j = 1, n \text{ and}$$
$$\text{Beta Adjusted Weights: } W(i) = \{M(i) / \beta(i)\} / \sum_1^n \{M(j) / \beta(j)\}, i \& j = 1, n$$

Where:

$W(i)$  = Portfolio Weight of Security(i)

$M(j)$  = Market Capital of Security(j)  
 $\beta(j)$  = relative volatility of Security(j) (Vs. S&P 500 index)  
 $n$  = The number of securities in the model portfolio

Under this allocation model, highly capitalized company's securities receive greater investments of the portfolio assets. High market capital stocks (e.g., Tesla [TSLA]) exert an outsized influence on the portfolio's performance and volatility. At present, TSLA accounts for approximately 57% of the value and performance of our Market Capital Weighted Portfolio.

## Historical Trend Weighted Portfolios (2)

The Historical Trend Weighted Portfolios apportion the current value of the portfolio based on the 1-Year change in the price of securities included in the model at close on the date of the analysis:

$W(i) = [TV(i) \times \delta(i)] / \sum_1^n [TV(j) \times \delta(j)]$ ,  $i \& j = 1, n$  and  
Beta Adjusted Weights:  $W(i) = \{TV(i) \times [\delta(i) / \beta(i)]\} / [\sum_1^n \{TV(j) \times \delta(j) / \beta(j)\}]$ ;  $i \& j = 1, n$ ;

Where:

$W(i)$  = Portfolio Weight of Security(i)  
 $\delta(j)$  = 1-Year % Historical Change in the price of Security(j)  
 $\beta(j)$  = relative volatility of Security(j) (Vs. S&P 500 index)  
 $n$  = The number of securities in the model portfolio

And:

$TV(k) = 0$  If  $\delta(k) \leq 0$   
Otherwise,  $TV(k) = 1$  If  $\delta(k) > 0$

Under this allocation model, Companies whose stock appreciated more than those of other stocks during the immediately preceding year (on a Historical or Beta Adjusted basis) receive greater investments of the portfolio assets. Stocks that have lost value in the prior one-year period receive no investment in the rebalanced portfolio.

High market appreciation stocks and stocks that exhibit unusually low volatility exert an outsized influence on the portfolio's performance. For Example, Quantum Scape (QS) accounts for approximately 9% of investment in the Historic Gain Weighted Portfolio, and 25% of the value and performance of investment in the Beta Adjusted Historic Gain Weighted Portfolio. The disparity is attributable to QS's extraordinarily low volatility: Beta(QS) vs. S&P 500 = 0.2

On the other hand, the algorithm (in its present form – which we may later examine and modify) eliminates any security that lost value in the 1-year period immediately prior to our analysis date. In the inaugural edition of the EAV Initiative, this rule eliminated several EAV Manufacturers from the portfolio. [Workhorse (WKHS), Nikola (NKLA), Kandi (KNDI), and Lordstown (RIDE)]

It is axiomatic among financial advisors that “**Past performance is no guarantee of future results.**” In fact, the phrase is generally treated as a warning label: Don't assume an investment will continue to do well in the future simply because it has done well in the past. Notwithstanding that caution: The weights accorded to securities in this allocation model are predicated entirely on the securities' recent

price performance and volatility. Exercise caution if you base your own allocation on these weights. Please review our comments regarding the use of this information as a predictive device.

The “Beta Adjusted” version of this portfolio adjusts the Security’s Historical Gain or Loss to account for different degrees of volatility and/or risk between the portfolio’s securities. At present, we use the Security’s Beta vs. the S&P 500 as a proxy for risk and volatility. We make no adjustment for correlation between the companies in our database or their correlation with the S&P 500. (See our comments regarding the use of Beta, “Portfolio Volatility,” below.)

#### Projected Performance Weighted Portfolios (4)

The Projected Performance Weighted Portfolios apportion the current value of the portfolio based on the average of Analyst’s Projected 1-Year change in the price of securities included in the model at close on the date of the analysis:

$$W(i) = [TV(i) \times R(i)] / \sum_1^n [TV(j) \times R(j)], i \& j = 1, n \text{ and}$$
$$\text{Beta Adjusted Weights: } W(i) = \{TV(i) \times [R(i) / \beta(i)]\} / [\sum_1^n \{TV(j) \times R(j) / \beta(j)\}]; i \& j = 1, n;$$

$$W(i) = [TV(i) \times R(i) \times SQRT(A)] / \sum_1^n [TV(j) \times R(j) \times SQRT(A)], i \& j = 1, n \text{ and}$$
$$W(i) = \{TV(i) \times R(i) \times SQRT(A) / \beta(i)\} / [\sum_1^n \{TV(j) \times R(j) \times SQRT(A) / \beta(j)\}]; i \& j = 1, n;$$

Where:

$W(i)$  = Portfolio Weight of Security(i)

$R(j)$  = Forecast 1-Year % change in the price of Security(j) by analysts who cover the Security.

$\beta(j)$  = relative volatility of Security(j) (Vs. S&P 500 index)

$A$  = Number of analysts who analyse or rate the security

$n$  = The number of securities in the model portfolio

And:

$$TV(k) = 0 \text{ If } R(k) \leq 0$$

$$\text{Otherwise, } TV(k) = 1 \text{ If } R(k) > 0$$

$R(k)$  (The forecast 1-Year rate of change of Security(k)’s value), is the arithmetic mean of the analysts’ forecasts that CFA has access to on an ongoing basis. Not all analysts cover all of the securities in our database. Any given security (and its associated mean) may be evaluated by as few as 1 or as many as ~40 analysts. CFA does not review these analysts’ findings or methodologies (see “Third Party Research Disclosure,” below).

If only a small number of analysts review a security, the projection may be unreliable. As we note in other publications, many of the companies in our database are immature (and a number of them are pre-revenue and pre-production at scale). This, in some cases, obviates both technical and fundamental analysis of the company stock’s probably value and appreciation – with (mostly negative) repercussions on the reliability of analysts’ forecasts. We compensate for differing coverage levels by adjusting weights based on the Square Root (SQRT) of the number of analysts who cover the security.

Under this allocation model, Companies whose stock analysts forecast to appreciate more than those of other stocks during the immediately following year receive greater allocations of the portfolio assets. High market appreciation stocks and stocks that exhibit unusually low volatility exert an outsized

influence on the portfolio's performance. For Example, Quantum Scape (QS) accounts for approximately 9% of investment in the Projected Gain Weighted Portfolio, and 16% of the value and performance of investment in the Beta Adjusted Historic Gain Weighted Portfolio. The disparity is attributable to QS's extraordinarily low volatility: Beta(QS) vs. S&P 500 = 0.2. Similar considerations affect allocations to Faraday Future Intelligent Electric (FFIE).

The algorithm (in its present form – which we may later examine and modify) eliminates any security that analyst consensus indicates will lose value in the 1-year period immediately following our analysis date. In the inaugural edition of the EAV Initiative, this rule eliminated Arcimoto (FUV) from the portfolio.

The “Beta Adjusted” version of this portfolio adjusts the Projected Gain or Loss % to account for different degrees of volatility and/or risk between the securities in the portfolio. At present, we use the security's Beta vs. the S&P 500 as a proxy for risk and volatility. We make no adjustments for correlation or counter correlation between the companies in our database.

#### Trade Volume Weighted Portfolios (4)

Cambyes' Trade Volume Weighted Portfolios apportion the current value of the portfolio based on the average daily number of shares traded or the daily average dollar-value of shares traded for the securities included in the model at close on the date of the analysis:

$$W(i) = TVol(i) / \sum_1^n TVol(j); i \& j = 1, n,$$
$$Beta \text{ Adjusted Weights: } W(i) = \{ TVol(i) / \beta(i) \} / \sum_1^n \{ TVol(j) / \beta(j) \}, i \& j = 1, n$$

$$W(i) = TDol(i) / \sum_1^n TDol(j); i \& j = 1, n,$$
$$Beta \text{ Adjusted Weights: } W(i) = \{ TDol(i) / \beta(i) \} / \sum_1^n \{ TDol(j) / \beta(j) \}, i \& j = 1, n$$

Where:

$W(i)$  = Portfolio Weight of Security(i)

$TVol(j)$  = 50-Day running average of shares traded (prior to the date of our analysis)

$TDol(j)$  =  $TVol(j) \times P(j)$  (a proxy for the dollar value of average trade volume)

$n$  = The number of securities in the model portfolio

In this allocation model, “Popular Companies” exert an outsized influence on the portfolio's performance. The portfolio is a “Camp Follower” approach to allocation – “I just do whatever everybody else is doing.” The hazards of that approach should be, but apparently are not, obvious. As witness, the Tech and Real Estate Bubbles and the recent value gyrations of “Meme Stocks.”

#### Blind Drunk Monkey Portfolio

Cynics sometimes assert that a Blind Drunk Monkey could choose a stock portfolio as well as most analysts. We thought we'd test that hypothesis.

Cambyes' Blind-Drunk Monkey Portfolio apportions the current value of the portfolio based on

- 1) randomly selecting companies from our database, and
- 2) randomly allocating the portfolio's value to the selected companies.

This approach requires that we generate two linear random variables for each company in our database:

$TV01(k) = 0$  If  $Rand(k) < \text{Threshold}$ ; (Which we arbitrarily set as .666667 for now)  
 $TV01(k) = 1$  If  $Rand(k) \geq \text{Threshold}$

$TV02(k) = Rand(k)$ ;  $0 < TV02 \leq 1$

We then apportion the current value of the portfolio based on the random variables as follows:

$$W(i) = [TV01(i) \times TV02(i)] / \sum_{j=1}^{\tilde{n}} [TV01(j) \times TV02(j)], i \ \& \ j = 1, n$$

Where:

$W(i)$  = Portfolio Weight of Security(i)

$TV01(j)$  = Defined Above

$TV02(j)$  = Defined Above

$\tilde{n}$  = The number of securities selected for inclusion in the model portfolio

We will not publish portfolio weights for this portfolio (for fear they may be misinterpreted) but will provide a running summary of the Blind Drunk Monkey's success or failure.

### Portfolio Volatility – All Portfolios

We estimate portfolio volatility for each portfolio by reference to the S&P 500 Beta statistic for the individual securities included in the portfolio as quoted by Thomson Reuters on the date of our analysis. Our estimator represents a first approximation of portfolio volatility computed as:

$$\beta(\text{Portfolio}) \approx \sum_{j=1}^n [W(j) \times \beta(j)], j = 1, n$$

Where:

$W(j)$  = Portfolio Weight of Security(j); (Differently defined for each Portfolio)

$\beta(j)$  = S&P 500 Beta statistic of Security(j) as quoted by Thomson Reuters

$n$  = The number of securities in the model portfolio

Note that this approximation does not consider the effects of correlation between portfolio securities. Correlations may either amplify or dampen portfolio volatility. Early indications are that the securities in our dataset exhibit minimal or moderate correlation to each other. That preliminary finding, if verified by long term findings, would reduce our estimate of portfolio volatility by up to 16%. i.e., Our current Beta estimate overstates probable volatility of the portfolios.

## Forward Looking Statements Disclosure

This document contains forward-looking statements. Forward-looking statements involve known and unknown risks, uncertainties and other factors which may cause actual results, performance or achievements to be materially different from expected future results, performance, or achievements.

Words such as "anticipate," "believe," "could," "estimate," "expect," "forecast," "goal," "intend," "may," "plan," "project," "seek," "target," "will," "would" and their opposites and similar expressions are intended to identify forward-looking statements.

Forward-looking statements are based on the beliefs of management as well as assumptions made by and information currently available to management. Many factors could cause actual results to differ materially from those indicated by forward-looking statements.

## Outside Research Disclosure Notice

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