



BARROW STREET

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ADVISORS

Equity Research

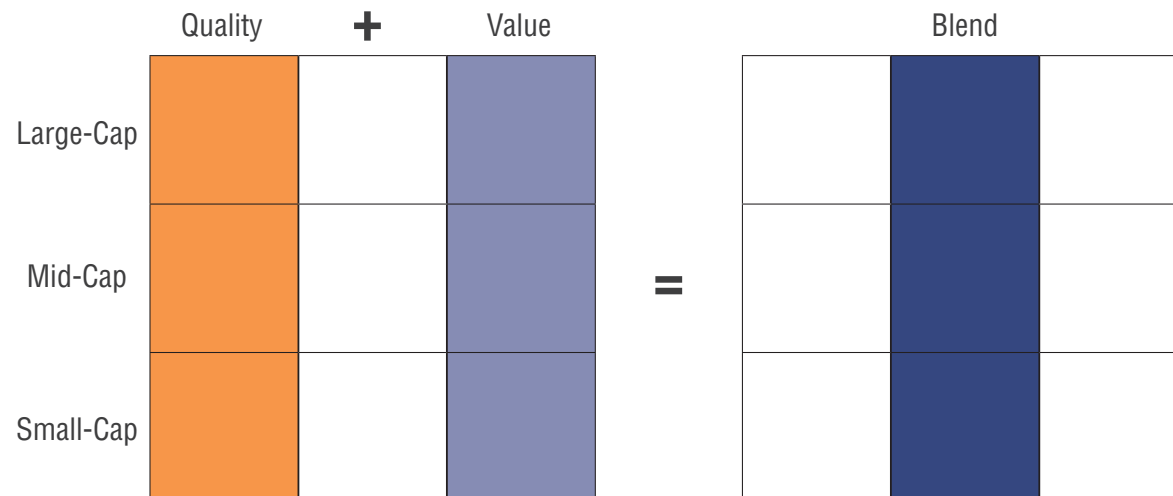
# The Power of Quality-meets-Value

# Barrow Quality-meets-Value

Common Investor Beliefs...

## Many Investors Believe:

1. Security prices are generally efficient over time, though they can offer mis-pricing opportunities in the short-term
2. Exposure to Quality generates outsized returns and exposure to Value generates outsized returns
3. Blending a Quality portfolio with Value portfolio yields the weighted average of the two returns



## Barrow's Hypotheses:

1. Selecting individual stocks at the intersection of Quality and Value ("Quality-meets-Value"<sup>1</sup>) delivers a more attractive return than blending Quality portfolios with Value portfolios
2. Securities with coincidence of Strong Quality and Value will outperform those with coincidence of weak Quality and Value

<sup>1</sup> Barrow defines Quality as earnings power, profit margins and insider ownership among other metrics. We define Value as enterprise value to cash flow and discount to intrinsic value among other metrics. The intersection of the two is when a stock exhibits both characteristics simultaneously.

# Barrow Quality-meets-Value

## Research Hypothesis I

### Research Hypothesis I:

Barrow believes that selecting individual stocks at the intersection of Quality and Value delivers a more attractive return than blending Quality portfolios with Value portfolios

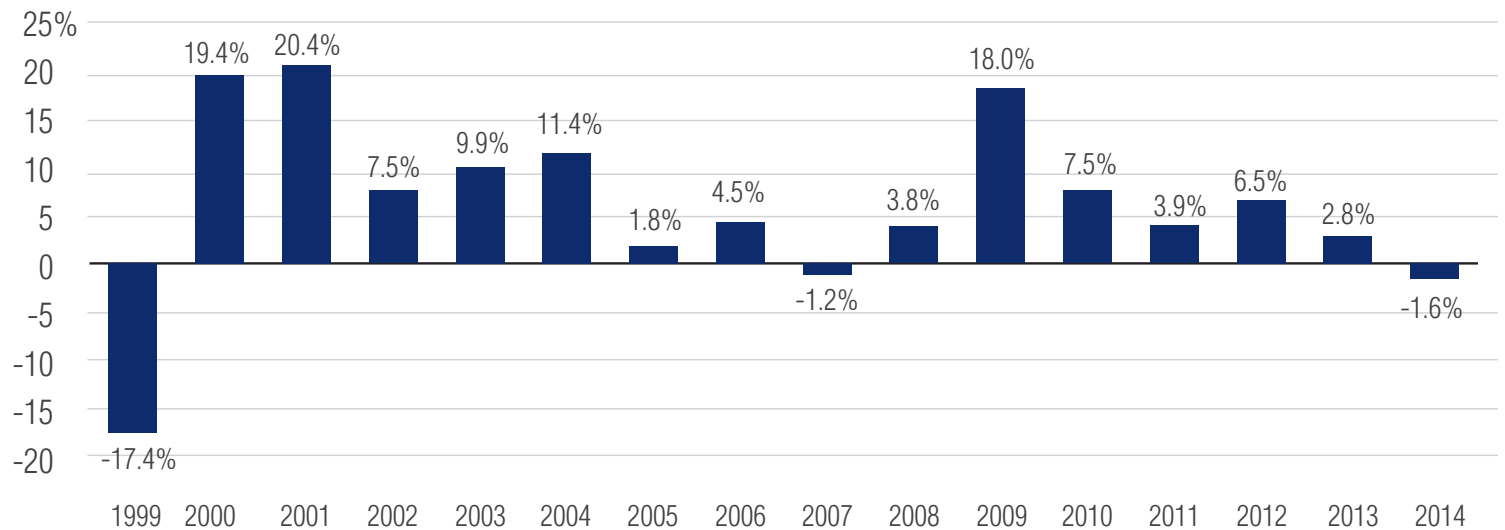


# Barrow Quality-meets-Value

## Barrow's Findings

1. Over the time period 1999-2015, average returns of quarterly Top Quintile Quality-meets-Value portfolios outperformed quarterly Top Quintile Quality and Value Blend\* portfolios by over 600 basis points
2. This was also true when measured by calendar year when Top Quintile Quality-meets-Value returns outperformed Top Quintile Quality and Value Blend returns in 13 of 16 calendar years, or 81% of the time

### Top Quintile Quality-meets-Value vs. Top Quintile Quality and Value Blend Funds



\*Top Quintile Quality is defined as the average return of multi-cap growth funds, as defined by Lipper, that were in the top quintile of performance for the trailing 20-year return as of 8/31/15. Top Quintile Value is defined as the average return of multi-cap value funds, as defined by Lipper, that were in the top quintile of performance for the trailing 20-year return as of 8/31/15. Top Quintile Quality and Value Blend is defined as the average return of Top Quintile Growth and the Top Quintile Value.

### Research Hypothesis II:

- Based on our findings in Hypothesis I, we believe stocks with coincidence of strong Quality and Value will outperform those with coincidence of weak Quality and Value
- We believe securities rank ordered by Quality-meets-Value\* should perform in order of those ranks
  - At least, the top half should outperform the bottom half
  - At best, results should hold monotonically for narrow quantiles (deciles, quintiles, quartiles)

### Test:

- Use point-in-time database<sup>2</sup> to avoid using information which would have been unavailable at the time of ranking (earnings restatements, etc.)
- Use a time period covering three economic cycles (1999-2014)

<sup>2</sup> For this analysis Barrow used S&P Capital IQ Research Insight

\* As defunded by barrow

### Process:

- Assemble a universe of U.S. equities
- Pull financial statements for approximately 12,000 companies going back to December 1998
- Measure and rank Quality-meets-Value using fundamentals-based criteria
- Construct portfolios every calendar quarter representing top through bottom quintiles<sup>3</sup> of Quality-meets-Value ranking, on a market cap sector basis
- Measure performance of each portfolio over a 12-month holding period

### Key Facts:

- 62 quarterly portfolios built; 30 million data points evaluated
- Use only point-in-time-data<sup>2</sup>
- Seven of the ten GICS sectors represented in each market cap
- Weighted 20% Large-Cap, 40% Mid-Cap and 40% Small-Cap

<sup>3</sup> A quintile divides a data set into 5 equally-sized groups.

# Barrow Quality-meets-Value

## Key Findings

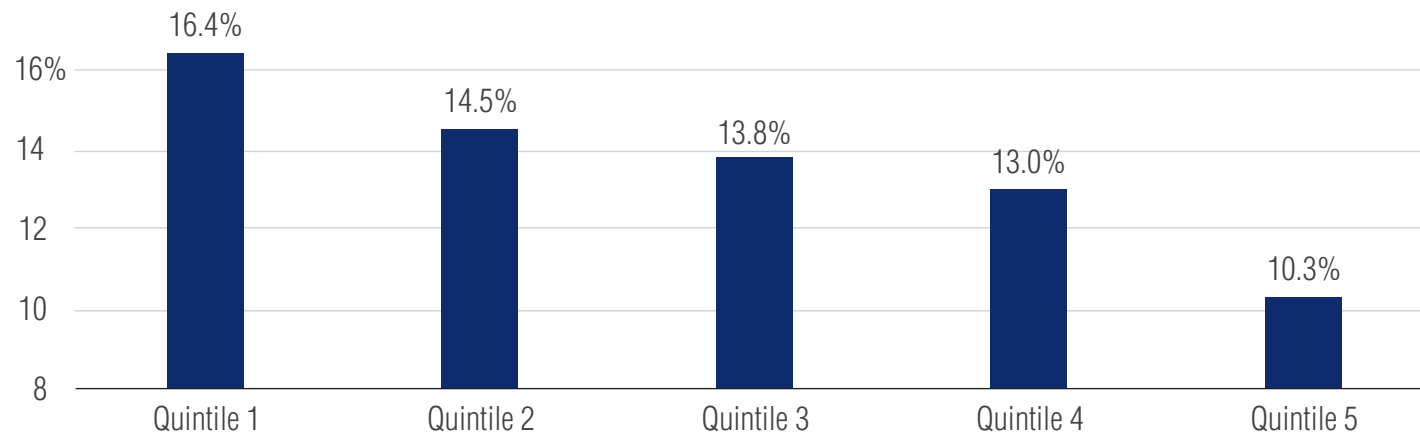
### Research:

1. Over the time period 1999-2015, average annual returns followed expectations as portfolios with better Quality-meets-Value attributes outperformed those with lesser
2. This was also true when measured by calendar year where the top quintile outperformed the data set's average middle quintile return in 13 of 16 calendar years, or 81% of the time

**1999 - 2015**

**Top Quintile Average Annual Outperformance = +2.8%**

**Top Quintile Average Annual Performance = +16.4%**

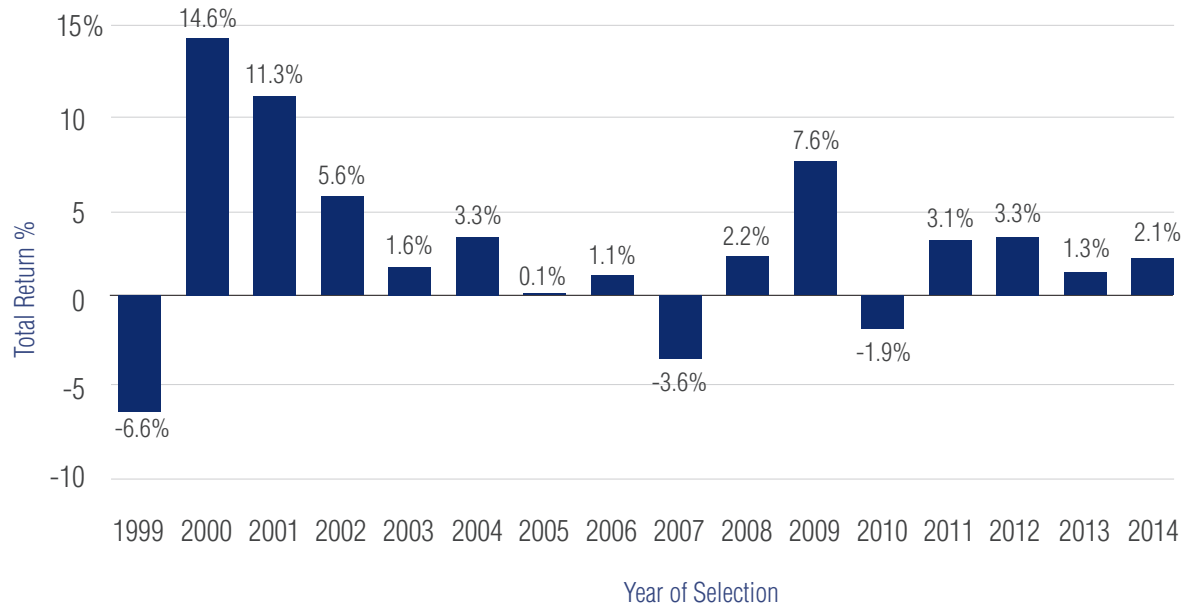




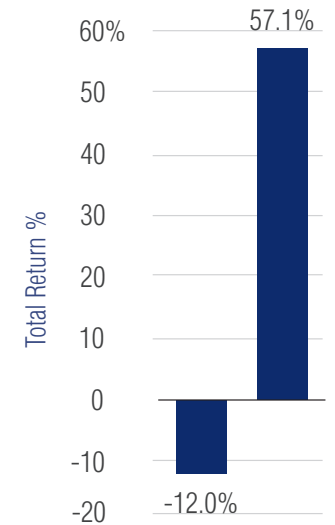
# Barrow Quality-meets-Value

## Key Findings (continued)

### Top Quintile vs. Average 1999-2015



### Cumulative Outperformance vs. Cumulative Underperformance 1999-2015



# Barrow Quality-meets-Value

## Conclusion + Questions

### Conclusion:

- Quality-meets-Value outperforms a blend of Quality and Value styles
- Quality-meets-Value stocks measured at the top quintile, outperform data set averages
- Higher and finer quantiles, such as the top 5th percentile, outperform by an even wider margin, showing potential to derive benefits from this method of security selection

### Questions:

- Can Quality-meets-Value be harnessed in tractable rules-based investment portfolios?
- Do the benefits of Quality-meets-Value stocks carry across all market caps? Securities?
- Can we run a test of how Quality-meets-Value performs as an applied investment approach through time? What does that track record look like?

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