Active vs. Passive Investments
Definitions:

Passive Investing

- An investing strategy that tracks a market-weighted index or portfolio.
- The investor receives the index return minus the management fee
- Reduces investment fees vs. active management
- Replaces the uncertainty of under or outperforming the Index with an “average” return

Source: Wikipedia and RVK
Active Investing

• Active strategies are where the manager makes specific investments with the goal of outperforming their index.

• Active strategies begin with the premise that an “active” selection of investment assets based on manager investment skill and/or the exploitation of certain market inefficiencies will result in a higher return than holding the entire basket of market assets.

Source: Investopedia and RVK
**Smart Beta Investing**

• Smart beta refers to an investment style where the manager passively follows an index designed to take advantage of perceived systematic biases or inefficiencies in the market.

• Smart beta strategies attempt to deliver a better risk and return trade-off than conventional market cap weighted indices by using alternative weighting schemes based on measures such as volatility or dividends.

• Smart Beta fund fees are normally between Active and Passive managers fees.

Source: Financial times and RVK
The Active vs. Passive Debate

• The benefits of active management versus a comparable passively managed investment is an ongoing debate

• While the debate is academically interesting, the only responsible answer must be “it depends on the asset class or market segment”

• Large efficient markets are more difficult to produce alpha (Beat the Index)

(Source RVK)
The Active vs. Passive Debate

The Case for Active Investing

• Markets are efficient, but investors are not - if no market is entirely efficient, then there is the potential for active outperformance

• Avoid concentration risk - if a sector or stock becomes a large position relative to others in the index, an active manager can react accordingly

• Markets need active investors - markets will not function properly without active management, as someone has to do the “dirty work”

• Market cycles have different performance attributes

(Source RVK)
Market Cycles

Equity Example

• A case can be made for active or passive management, depending on the time period, or “regime”, analyzed
• Active management tends to perform better during periods of weak absolute returns

Figure 9. Percentage of managers outperforming market during bull and bear cycles

Sources: Vanguard calculations, using data from Morningstar, Inc., and Dow Jones.
The Active vs. Passive Debate

The Case for Passive Investing

• **Lower fees** - guaranteed “head start” relative to active Management

• **Lower maintenance** - no benchmark risk due to active “bets”, so it is less resource intensive to select, monitor, and terminate managers

• **No timing (managers) risk** - cannot make ill-timed move from one underperforming active manager to another

• **Little manager selection skill required** - gaining market exposure is relatively straightforward

• **Most Indexes are a zero sum game**
At every moment, the dollar-weighted positive excess performance equals the inverse of the dollar-weighted underperformance, such that the sum of the two equals the market return. However, in reality, investors are exposed to costs such as commissions, management fees, bid-ask spreads, administrative costs, market impact, and, where applicable, taxes—all of which combine to reduce investors’ realized returns over time.
## Average dollar-weighted expense ratios as of December 31, 2013

<table>
<thead>
<tr>
<th>Investment type</th>
<th>Actively managed funds</th>
<th>Index funds</th>
<th>ETFs</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>U.S. stocks</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Large-cap</td>
<td>0.80</td>
<td>0.11</td>
<td>0.14</td>
</tr>
<tr>
<td>Mid-cap</td>
<td>0.97</td>
<td>0.18</td>
<td>0.25</td>
</tr>
<tr>
<td>Small-cap</td>
<td>1.04</td>
<td>0.19</td>
<td>0.23</td>
</tr>
<tr>
<td><strong>U.S. equity sectors</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GICS sectors</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Real estate</td>
<td>0.92</td>
<td>0.13</td>
<td>0.20</td>
</tr>
<tr>
<td><strong>International stocks</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Developed market</td>
<td>0.91</td>
<td>0.17</td>
<td>0.29</td>
</tr>
<tr>
<td>Emerging market</td>
<td>1.16</td>
<td>0.21</td>
<td>0.42</td>
</tr>
<tr>
<td><strong>U.S. bonds</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corporate</td>
<td>0.58</td>
<td>0.11</td>
<td>0.13</td>
</tr>
<tr>
<td>Government</td>
<td>0.47</td>
<td>0.12</td>
<td>0.15</td>
</tr>
</tbody>
</table>

**Note:** GICS = Global Industry Classification System.

**Sources:** Vanguard calculations, using data from Morningstar, Inc. Discrepancies are due to rounding.
Based on data as of Dec. 31, 2014, 86.44% of large-cap fund managers underperformed the benchmark over a one-year period. This figure is equally unfavorable when viewed over longer-term investment horizons. Over 5- and 10-year periods, respectively, 88.65% and 82.07% of large-cap managers failed to deliver incremental returns over the benchmark.

(Source: S&P Dow Jones Indicies and RVK)
# Manager Excess Returns Summary

**Long-Term 3-Year Rolling Average (Net of Fees)**  
January 2001 – December 2014

<table>
<thead>
<tr>
<th>INTERNATIONAL EQUITY</th>
<th>25th Percentile</th>
<th>Median</th>
<th>75th Percentile</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intl Small Cap Equity*</td>
<td>4.12%</td>
<td>1.74%</td>
<td>-0.99%</td>
</tr>
<tr>
<td>Intl Emerging Markets Equity</td>
<td>3.13%</td>
<td>0.73%</td>
<td>-1.44%</td>
</tr>
<tr>
<td>Intl Large Cap Equity (ACW xUS)</td>
<td>2.14%</td>
<td>0.03%</td>
<td>-1.88%</td>
</tr>
<tr>
<td>Intl Large Cap Core Equity</td>
<td>1.16%</td>
<td>-0.27%</td>
<td>-1.62%</td>
</tr>
</tbody>
</table>

*Jan 2001 population for Intl Small Cap Equity – 21.
Manager Excess Returns Summary
Long-Term 3-Year Rolling Average (Net of Fees)
January 2001 – December 2014

<table>
<thead>
<tr>
<th>FIXED INCOME</th>
<th>25th Percentile</th>
<th>Median</th>
<th>75th Percentile</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core Plus Fixed Income</td>
<td>1.76%</td>
<td>0.89%</td>
<td>0.03%</td>
</tr>
<tr>
<td>Core Fixed Income</td>
<td>0.77%</td>
<td>0.26%</td>
<td>-0.33%</td>
</tr>
<tr>
<td>High Yield Fixed Income</td>
<td>0.67%</td>
<td>-0.39%</td>
<td>-1.46%</td>
</tr>
</tbody>
</table>

(Source RVK)
FIXED INCOME
Core Fixed Income
Manager Excess Returns – Rolling 3-Year Periods (beginning January 2001)

Excess Returns are performed relative to the Barclays Aggregate Bond Index
Assumed Annual Management Fee: 21.5(bp)
Peak Population: 250

(Source RVK)
The Persistence Scorecard

• Relatively few funds consistently stay at the top

• Out of 678 domestic equity funds that were in the top quartile as of September 2013, only 4.28% managed to stay in the top quartile by the end of September 2015

• Furthermore, 1.19% of the large-cap funds, 6.32% of the mid-cap funds, and 5.41% of the small-cap funds remained in the top quartile

Source: S&P Dow Jones Indices
Percentage of active funds **underperforming** the average return of low-cost index funds

Sources: Vanguard and Morningstar, Inc.
Active vs. Passive Summary

• For some asset classes, investable indices do not exist or are imperfect

• Investors should consider:
  – Index manager fees
  – Trading costs
  – Opportunity costs

• Benefits of active management tend to hinge on the investor’s ability to select better than average managers

• Particularly efficient markets provide less opportunity for active managers to add value above the index.