**Trading Strategies R&D Assignment**
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**Portfolio Returns (Equal-Weighted)**

| L | 2 | 3 | 4 | H | Non R&D |
|---|---|---|---|---|---|
| **Full Sample Period (1981.07 - 2012.12)** | | | | | |
| 0.266 | 0.615 | 0.871 | 1.146 | 1.761 | 0.712 |
| **Pre-2000 Period (1981.07 - 1999.12)** | | | | | |
| 0.245 | 0.623 | 0.873 | 1.132 | 1.708 | 0.573 |
| **Post-2000 Period (2000.01 - 2012.12)** | | | | | |
| 0.295 | 0.603 | 0.869 | 1.166 | 1.837 | 0.909 |

**Long Short Portfolio (Equal-Weighted 1981-2012)**

| | CAPM | Fama-French 3 Factor |
|---|---|---|
| **Alpha** | 1.437% | 1.414% |
| **T-Stat** | 5.691 | 6.301 |

**Sharpe Ratio (annual):** 1.060

**Portfolio Returns (Value-Weighted)**

| L | 2 | 3 | 4 | H | Non R&D |
|---|---|---|---|---|---|
| **Full Sample Period (1981.07 - 2012.12)** | | | | | |
| 0.458 | 0.615 | 0.687 | 0.898 | 0.992 | 0.552 |
| **Pre-2000 Period (1981.07 - 1999.12)** | | | | | |
| 0.698 | 0.996 | 1.085 | 1.082 | 1.181 | 0.765 |
| **Post-2000 Period (2000.01 - 2012.12)** | | | | | |
| 0.116 | 0.073 | 0.121 | 0.637 | 0.722 | 0.248 |

**Long Short Portfolio (Value-Weighted 1981-2012)**

| | CAPM | Fama-French 3 Factor |
|---|---|---|
| **Alpha** | 0.333% | 0.109% |
| **T-Stat** | 1.337 | 0.494 |

**Sharpe Ratio (annual):** 0.365

**Portfolio Returns w/o Top 1000 (Value-Weighted)**

| L | 2 | 3 | 4 | H | Non R&D |
|---|---|---|---|---|---|
| **Full Sample Period (1981.07 - 2012.12)** | | | | | |
| 0.399 | 0.585 | 0.743 | 0.923 | 1.306 | 0.596 |
| **Pre-2000 Period (1981.07 - 1999.12)** | | | | | |
| 0.443 | 0.661 | 0.849 | 1.033 | 1.288 | 0.499 |
| **Post-2000 Period (2000.01 - 2012.12)** | | | | | |
| 0.337 | 0.476 | 0.593 | 0.767 | 1.331 | 0.734 |

**Long Short Portfolio w/o Top 1000 (Value-Weighted 1981-2012)**

| | CAPM | Fama-French 3 Factor |
|---|---|---|
| **Alpha** | 0.782% | 0.756% |
| **T-Stat** | 3.517 | 3.543 |

**Sharpe Ratio:** 0.714

**Repeat for 1981-2021**

**Portfolio Returns (Equal-Weighted)**

| L | 2 | 3 | 4 | H | Non R&D |
|---|---|---|---|---|---|
| **Full Sample Period (1981.07 - 2021.12)** | | | | | |
| 0.417 | 0.739 | 1.037 | 1.207 | 1.718 | 0.767 |

**Long Short Portfolio (Equal-Weighted 1981-2021)**

| | CAPM | Fama-French 3 Factor |
|---|---|---|
| **Alpha** | 1.208% | 1.246% |
| **T-Stat** | 5.367 | 6.254 |

**Sharpe Ratio (annual):** 0.916

**Portfolio Returns (Value-Weighted)**

| L | 2 | 3 | 4 | H | Non R&D |
|---|---|---|---|---|---|
| **Full Sample Period (1981.07 - 2021.12)** | | | | | |
| 0.570 | 0.836 | 0.876 | 1.069 | 1.147 | 0.631 |

**Long Short Portfolio (Value-Weighted 1981-2021)**

| | CAPM | Fama-French 3 Factor |
|---|---|---|
| **Alpha** | 0.3161% | 0.217% |
| **T-Stat** | 1.467 | 1.161 |

**Sharpe Ratio (annual):** 0.404

**Portfolio Returns w/o Top 1000 (Value-Weighted)**

| L | 2 | 3 | 4 | H | Non R&D |
|---|---|---|---|---|---|
| **Full Sample Period (1981.07 - 2021.12)** | | | | | |
| 0.552 | 0.750 | 0.897 | 1.118 | 1.467 | 0.625 |

**Long Short Portfolio w/o Top 1000 (Value-Weighted 1981-2021)**

| | CAPM | Fama-French 3 Factor |
|---|---|---|
| **Alpha** | 0.748% | 0.765% |
| **T-Stat** | 3.685 | 3.956 |

**Sharpe Ratio:** 0.701