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FIN 810 SV

**Fama French Five Factor Write Up**

Choose the time window 1/1/2018-12/31/2018 and daily frequency. Download the stock prices. Use the Fama French five factors and the Fama French Five Factor Model.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Facebook** | **Alphabet** | **Walt Disney Company** | **Johnson and Johnson** | **Roku** |
| Stock Symbol | FB | GOOGL | DIS | JNJ | ROKU |
| Return | -0.0010025 | 0.000051135 | 0.000070034 | -0.0000995 | -0.0011445 |
| Stdev of Return | 0.0239486 | 0.0177608 | 0.0130262 | 0.0138220 | 0.0438504 |
| Intercept | -0.00110 | 0.00003636 | 0.00021831 | 0.00007296 | -0.00133 |
| Int. (p-value) | 0.3526 | 0.9474 | 0.7072 | 0.9138 | 0.5775 |
| Beta | 0.89663 | 1.07235 | 0.93396 | 0.88558 | 1.08520 |
| Beta (p-value) | <0.0001 | <0.0001 | <0.0001 | <0.0001 | <0.0001 |
| SMB | -0.18032 | -0.34810 | 0.01488 | -0.41626 | 1.02969 |
| SMB (p-value) | 0.4433 | 0.0017 | 0.8976 | 0.0021 | 0.0306 |
| HML | -0.38846 | -0.24901 | -0.10455 | 0.16207 | -1.17658 |
| HML (p-value) | 0.1831 | 0.0678 | 0.4657 | 0.3297 | 0.0461 |
| RMW | -0.62734 | -0.39983 | 0.26194 | 0.59590 | -1.77446 |
| RMW (p-value) | 0.0648 | 0.0119 | 0.1165 | 0.0022 | 0.0098 |
| CMA | -1.49362 | -1.15519 | 0.53293 | 0.63379 | -1.76865 |
| CMA (p-value) | 0.0008 | <0.0001 | 0.0147 | 0.0124 | 0.0480 |
| Adj. R-Squared | 0.4032 | 0.7639 | 0.5122 | 0.4171 | 0.2758 |

1. Which stock in your portfolio has the largest stand-along risk? **Roku**
2. Which stock in your portfolio has the largest risk exposure to the market portfolio? **Roku**
3. Which stocks in your portfolio have higher expected returns if small-cap stocks outperform large-cap stocks? **Disney, Roku**
4. Which stocks in your portfolio have higher expected returns if has higher expected returns if high book-to-market (i.e., value) stocks outperform low book-to-market (i.e., growth) stocks? **Johnson and Johnson**