Erasmus Research Institute of Management

MPhil Thesis

Web Appendix

# Does Idiosyncratic Industry Volatility matter?

An investigation of the industry-specific volatility
for the cross-section of the U. S. stock returns


| | |
|---|---|
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# Contents

# 1 Description of the Web Appendix

In the web appendix, I present the figures and descriptive statistics of the dataset and the variables used in the thesis. I mostly use self-explanatory section/subsection headings for the elements of the appendix.

# Appendices

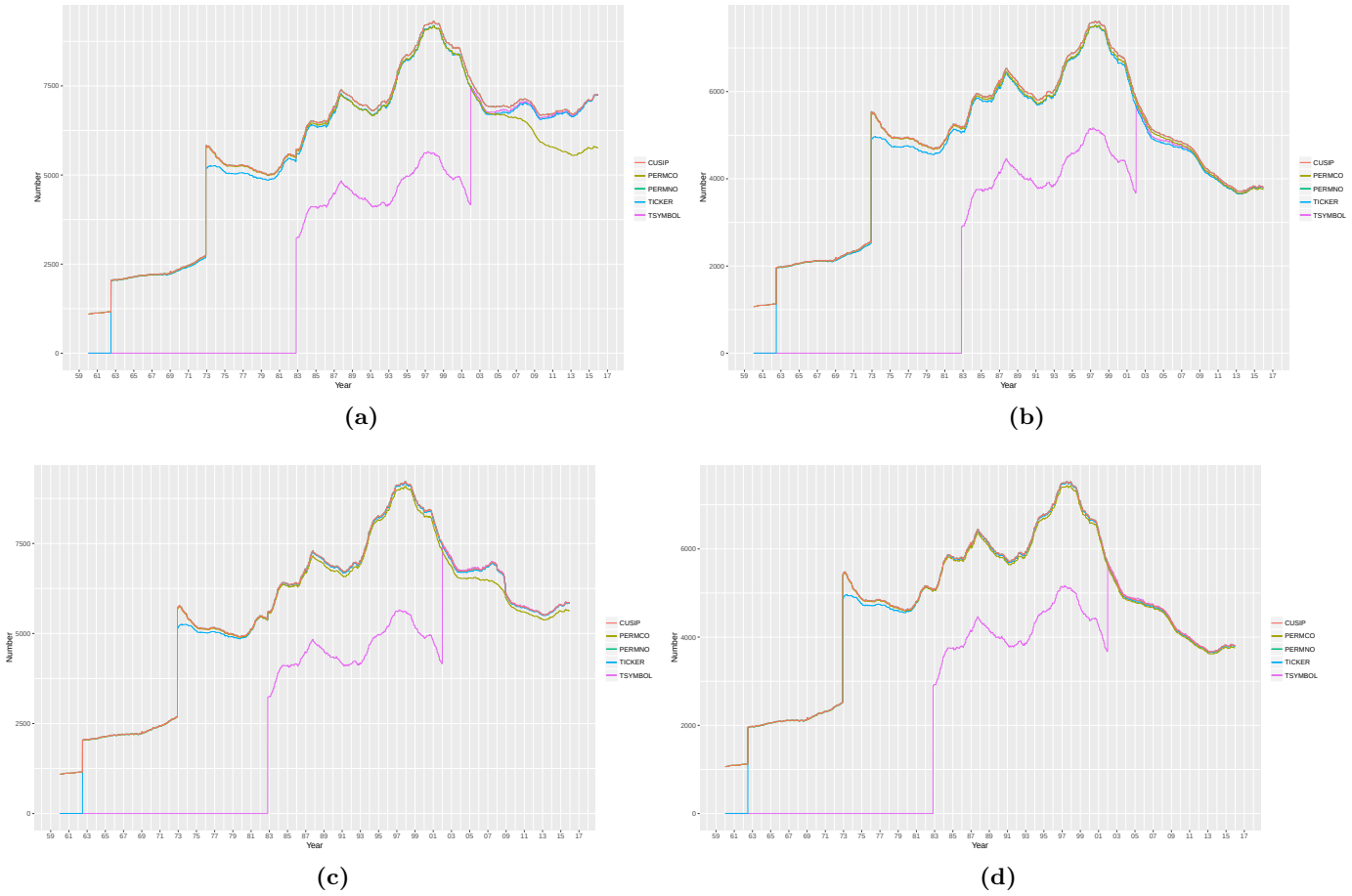
# Appendix A

# Figures

## 1 Rough picture of the dataset

I found it interesting to have some rough visual picture of the dataset and industries, conjecturing that this would somehow help me in exactly replicating other studies.

- Figure A.1 presents the number of stocks per month of the CRSP database. The purpose was to see how the identifiers behave.
- Figure A.2 briefly expores the exchange codes (`EXCHCD`).
- Figure A.3 presents the return histograms of the SIC 49 industries.
- Figure A.3 presents the return densities of the SIC 49 industries.
- Figure A.5 updates Figure 1 (p. 10) of Campbell et al.. As they do, I use the *annualized* standard deviations based on monthly data, following the definition in Schwert (1989). It seems almost identical to their figure.




**(a)** **(b)**

**(c)** **(d)**

**Figure A.1: Monthly number of stocks.** (a): For every exchange in US stock database, and for every share code. Note that the number of stocks has decreased since 1997. There is a sudden increase in late 1972 because of the inclusion of Nasdaq. In November 1972 the different PERMNOs are 2573, but in December 1972, 5540. Last, note that the number of CUSIP and PERMNO is identical, so they are perfect substitutes, at least after some basic screening which requires valid data: `identical(DTsn$uniqCUSIPs, DTsn$uniqPERMNOs)` returns: `[1] TRUE`. (b): For every exchange in US stock database, but with share code 10 or 11. The only striking difference to Figure A.1a is after 2005. (c): For the three exchanges only, but with every share code. (d): For the three exchanges only, but with share code 10 or 11.

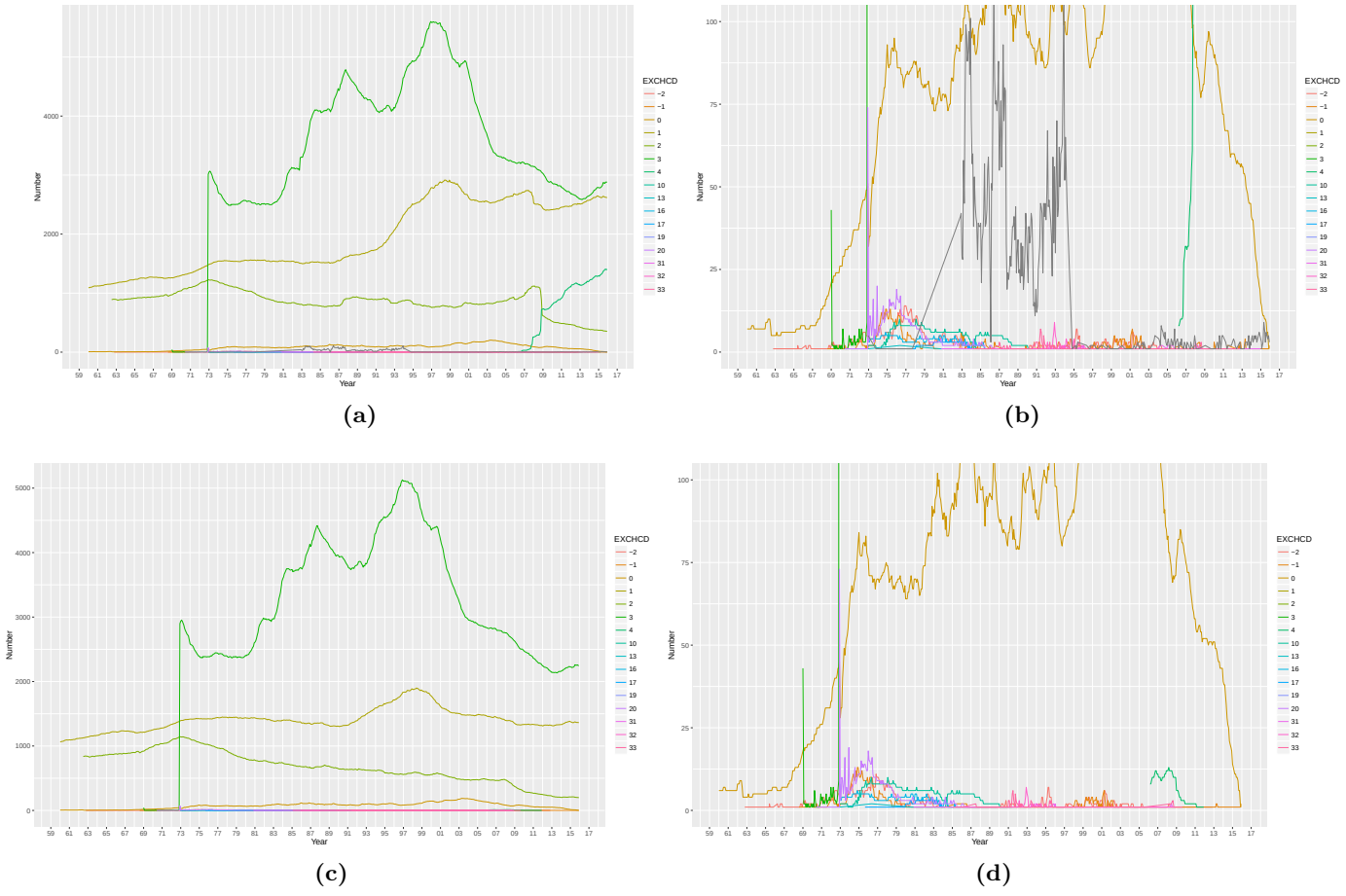



**Figure A.2: Monthly number of stocks per stock exchange.** (a): For every stock exchange. (b): Smaller scale of A.2a (c): For the NYSE, NYSE MKT and Nasdaq stock exchanges. (d): Smaller scale of A.2c

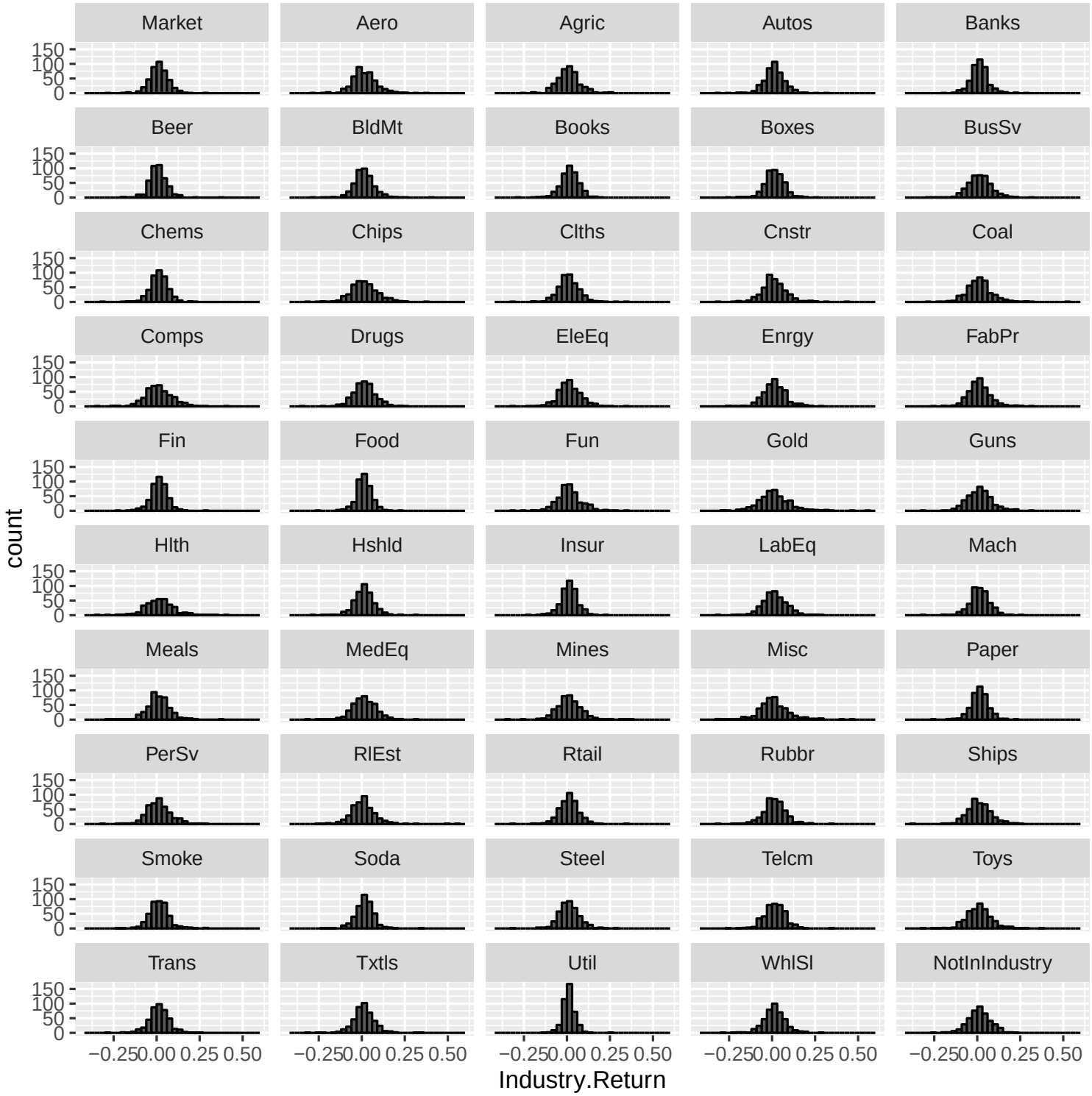



**Figure A.3:** Return histograms for the SIC 49 industries.

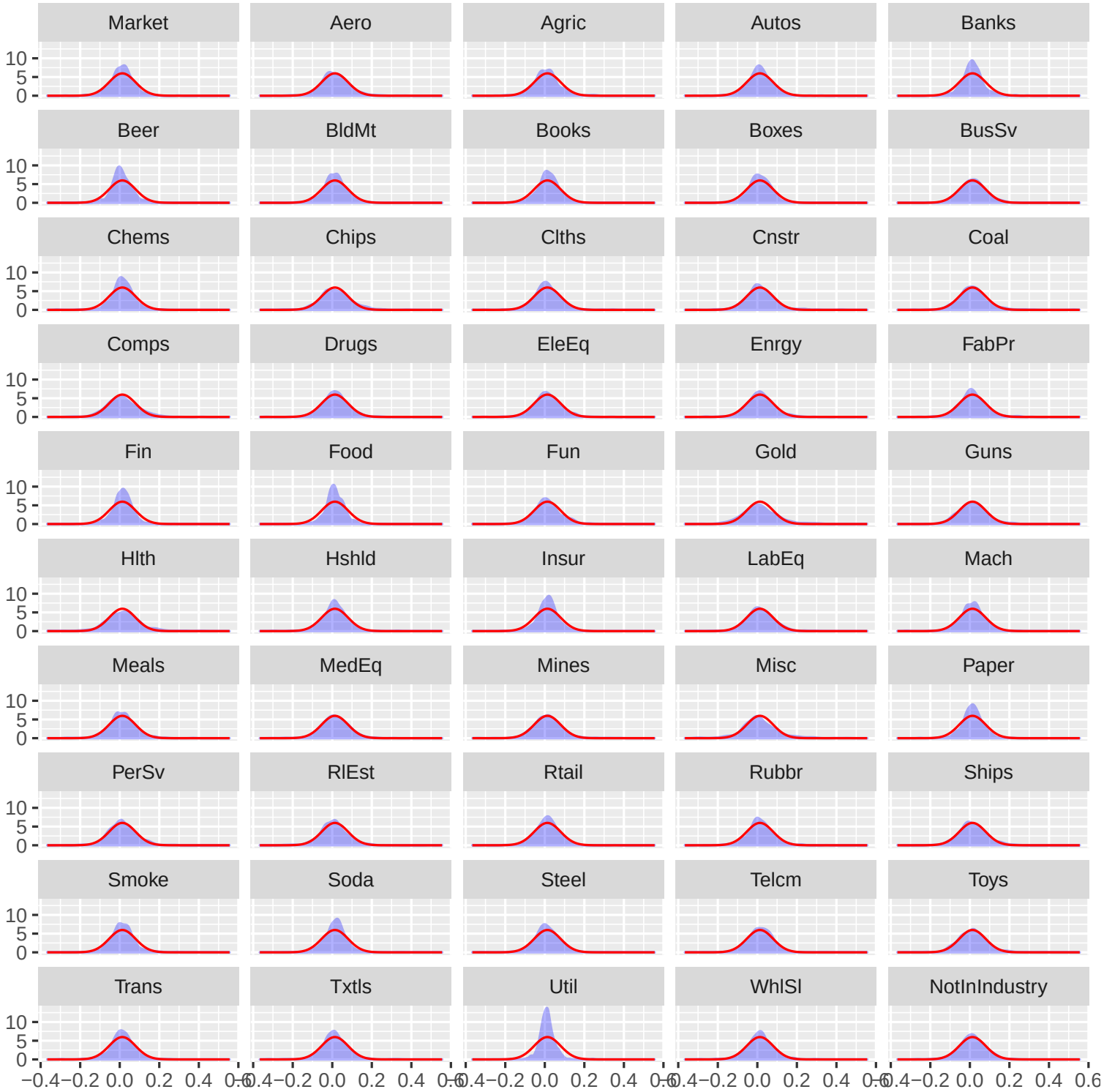



**Figure A.4:** Return Densities.

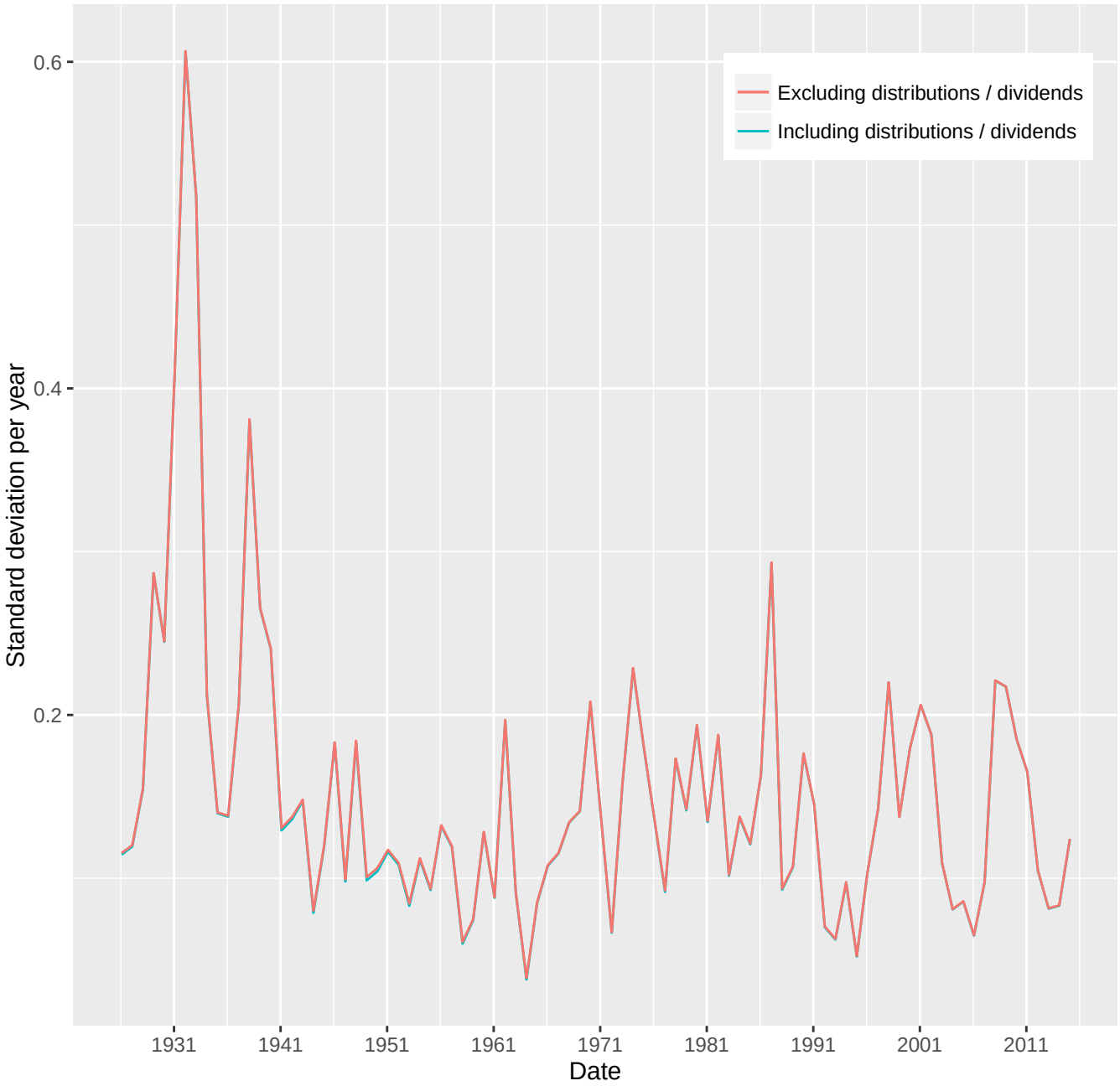



**Figure A.5:** Standard deviation of the value-weighted stock index including and excluding dividends. The difference between the two indices is indistinguishable and the Pearson, Spearman, Kendall correlation coefficients are 0.9999526, 0.9955056, 0.9998354, respectively.

## 2 Figures of the aggregate volatility series

In the process of replicating Campbell et al., I was not getting the paper's identical numbers (descriptive statistics) using their dataset as they described it. The Figures for $MKT$ and $FIRM$ were quite close to the published ones, but the value-weighted $IND$ had a period around 1978–84 where the small kinks and trouts of their figure were different than mine. I experimented with different value-weighted based schemes. They were all graphically very close, with correlation coefficients of more than 0.999 in general, for the case of $MKT$. Figure A.6 presents some of the variations I tried.[1]

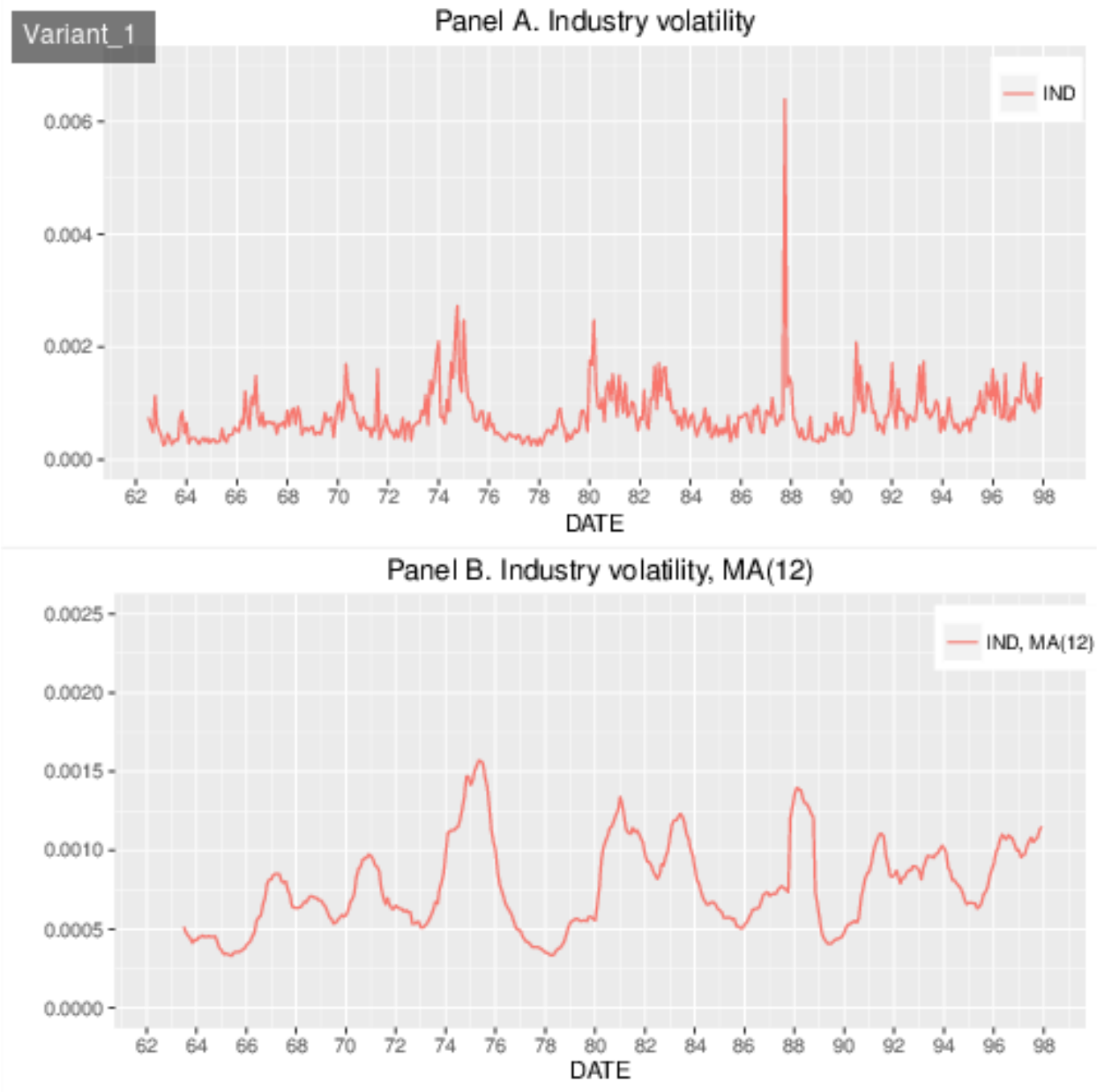



**Figure A.6: Animated value-weighted $IND$.** The animation is visible with the Acrobat Reader. I think (not sure) that the last variant 7 is the equally-weighted one. I only used a strange variant, so as to be easy to see when the animation starts over.

In the thesis, I use three industry classifications: (i) the SIC-based 49 industry classification of Fama and French (1997), (ii) the SIC-based 10 division classification of the U. S. Department of Labor and (iii) the FIC-based 25 industry

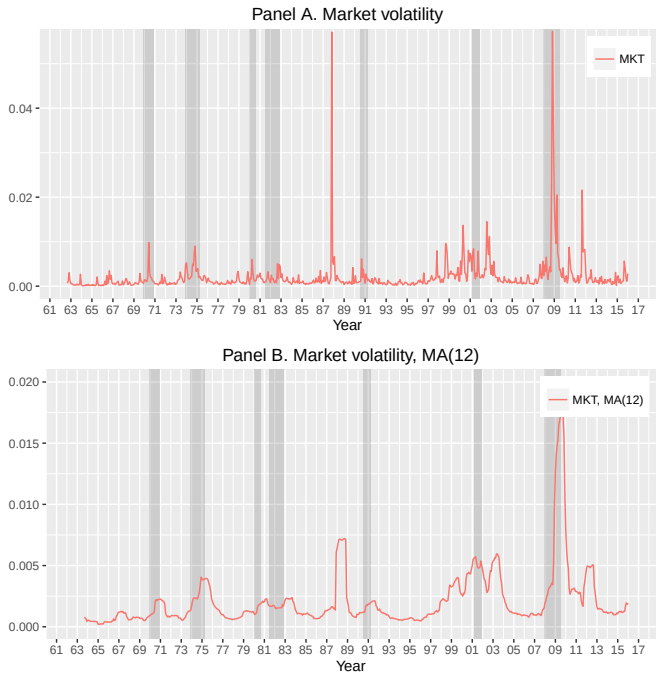
[1] I tried around 10 variations, but as far as I remember only 6 were close enough to the original figure and descriptive statistics.

classification of Hoberg and Phillips (2010, 2015). Herewith, I will refer to the three industry classifications as SIC-49, SIC-10 and FIC-25, respectively. For each industry classification, the following three sections replicate Figures 2, 3 and 4 for the three aggregate volatility series, $MKT$, $IND$ and $FIRM$, respectively.

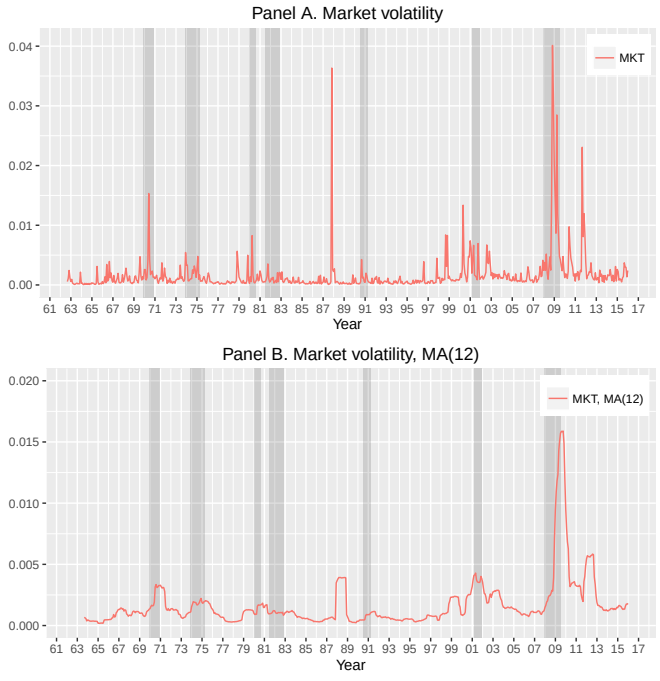
## 2.1 MKT

### 2.1.1 SIC-49

#### 2.1.1.1 Value-weighted

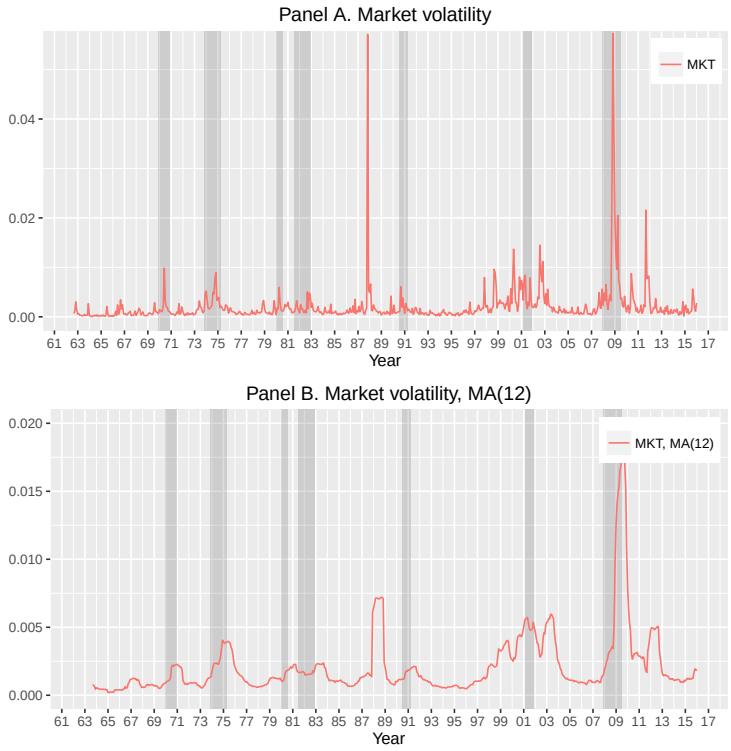



#### 2.1.1.2 Equally-weighted

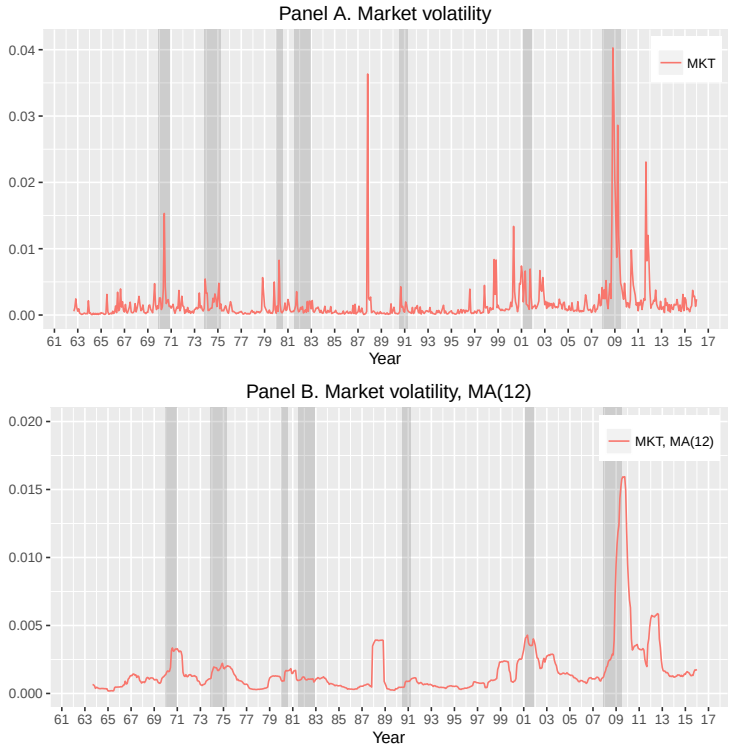


### 2.1.2 SIC-10

#### 2.1.2.1 Value-weighted

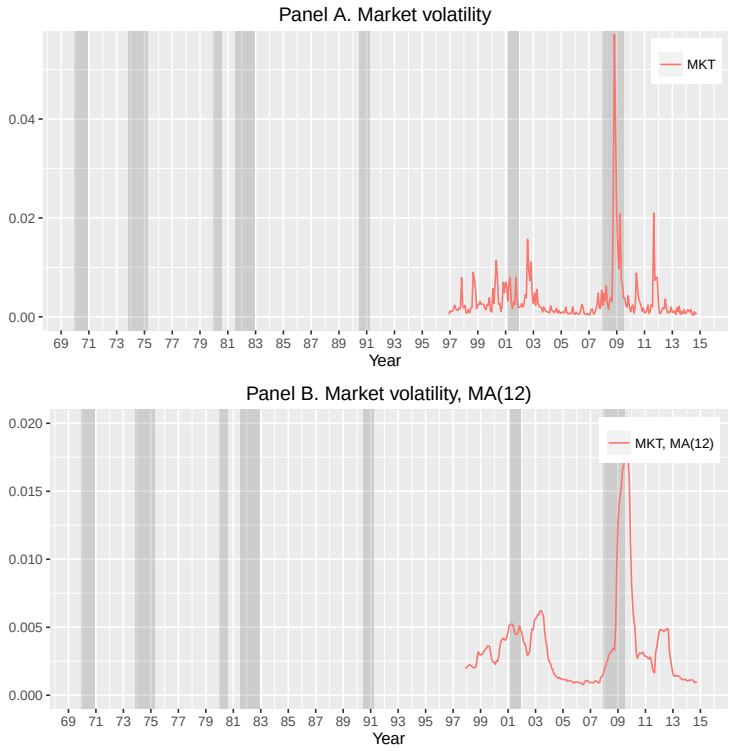



#### 2.1.2.2 Equally-weighted

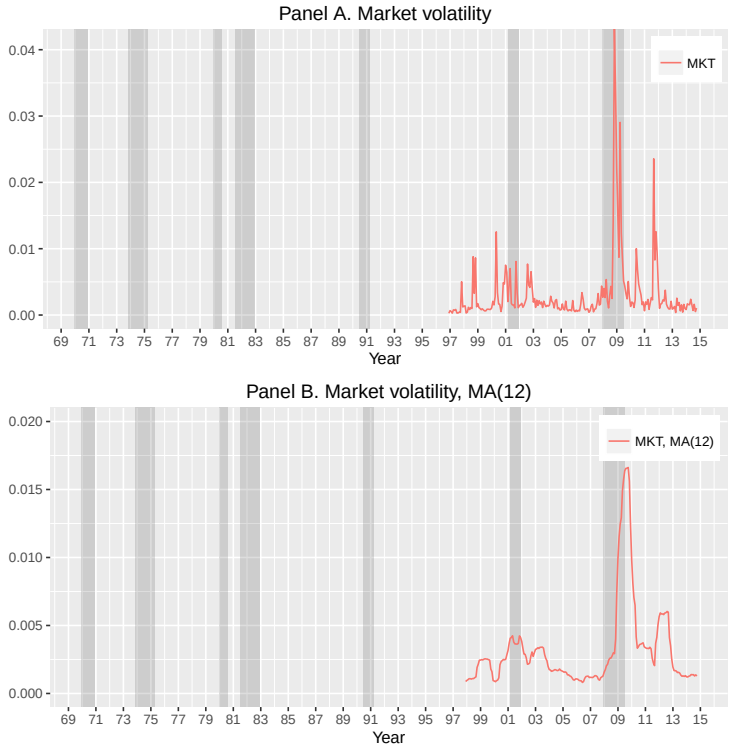


### 2.1.3 FIC-25

#### 2.1.3.1 Value-weighted



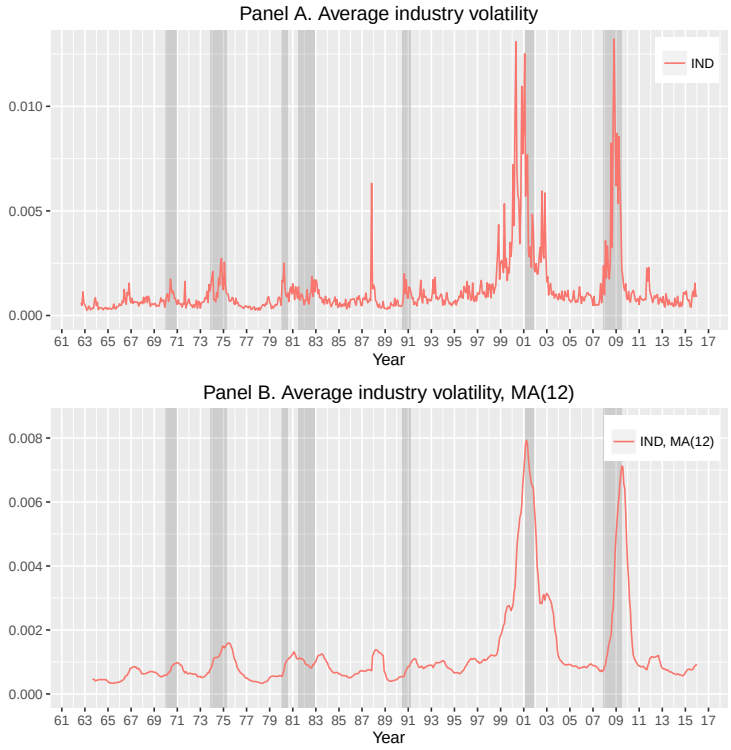

#### 2.1.3.2 Equally-weighted



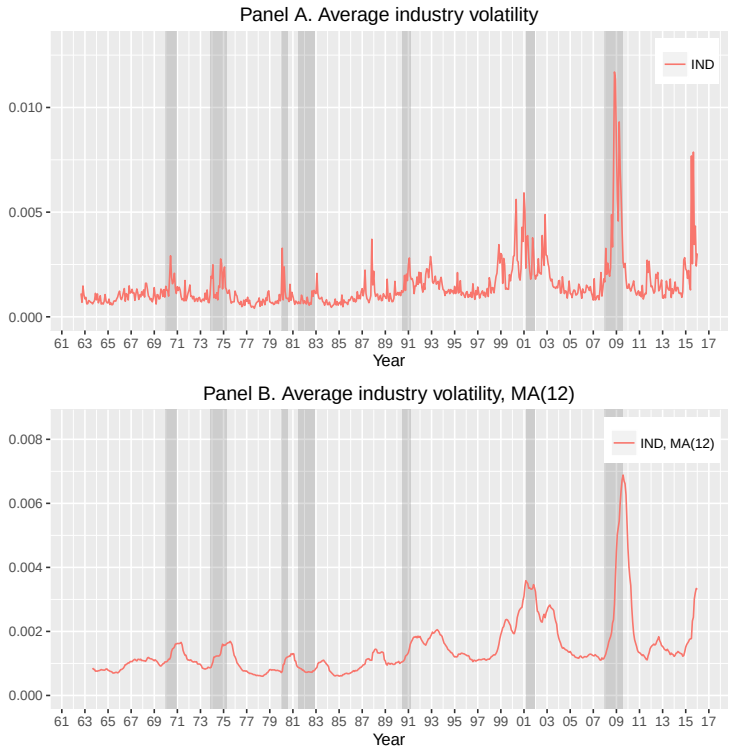
## 2.2 IND

### 2.2.1 SIC-49

#### 2.2.1.1 Value-weighted

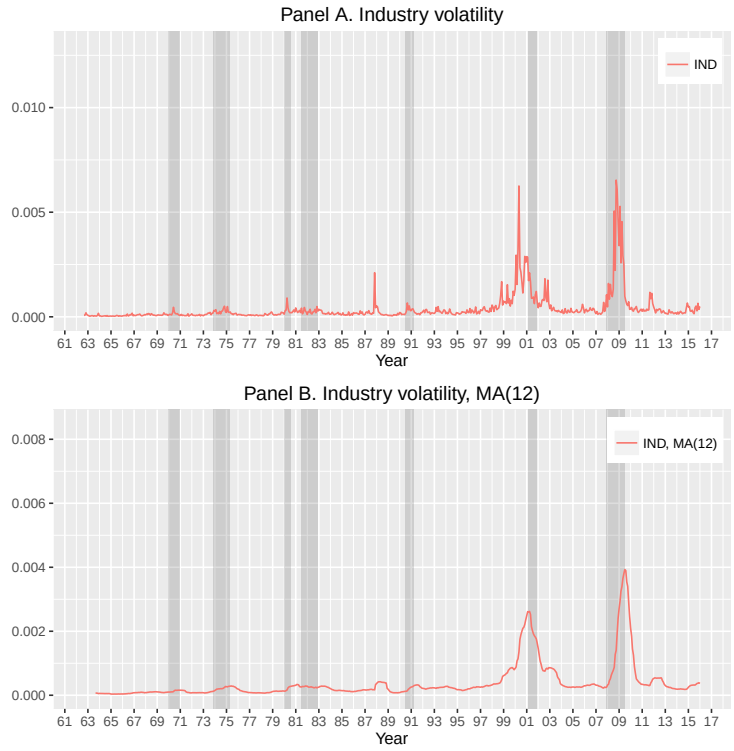



#### 2.2.1.2 Equally-weighted

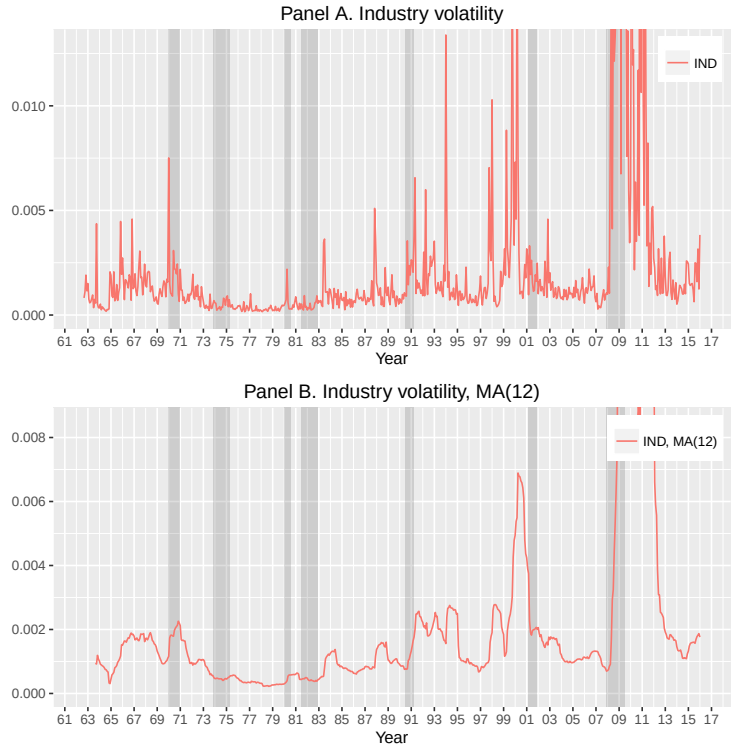


### 2.2.2 SIC-10

#### 2.2.2.1 Value-weighted

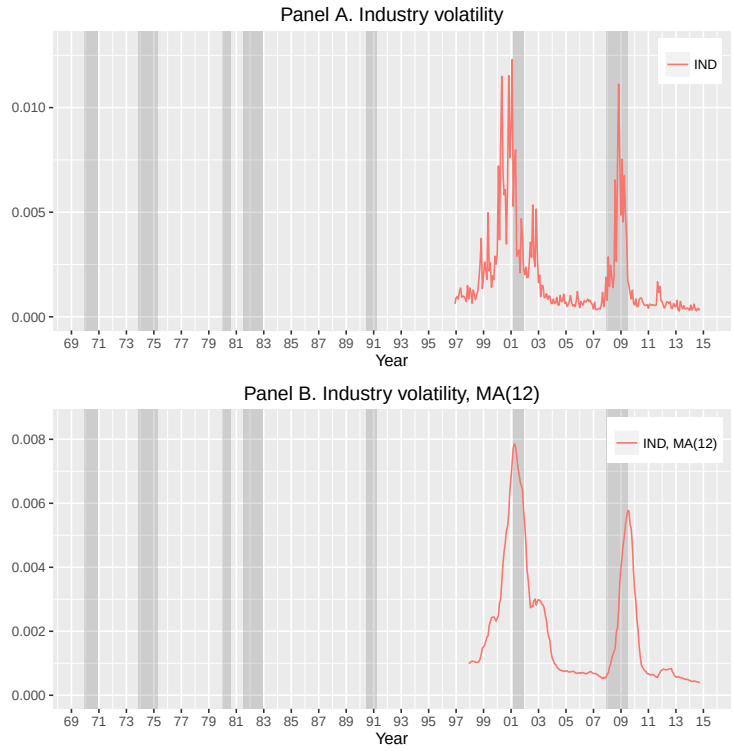



#### 2.2.2.2 Equally-weighted

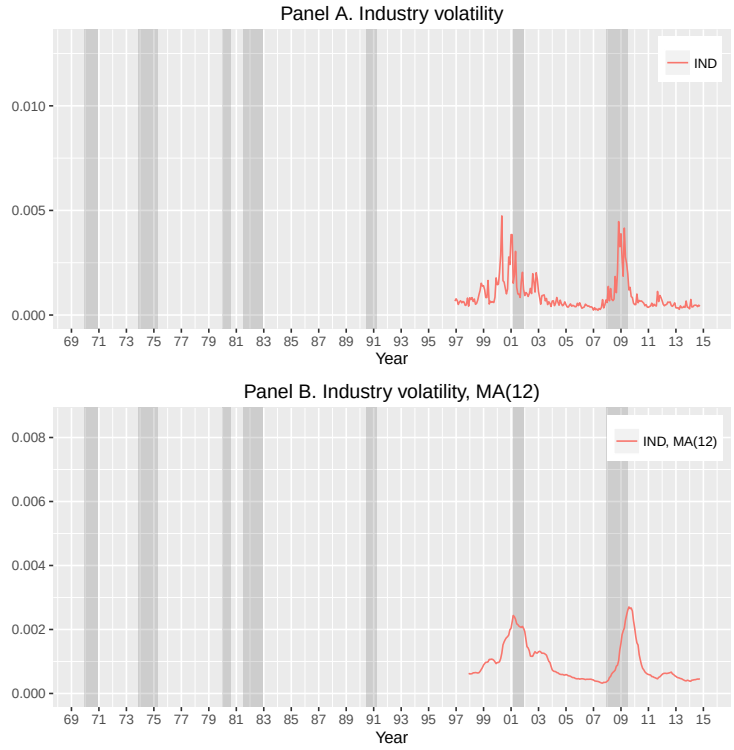


### 2.2.3 FIC-25

#### 2.2.3.1 Value-weighted



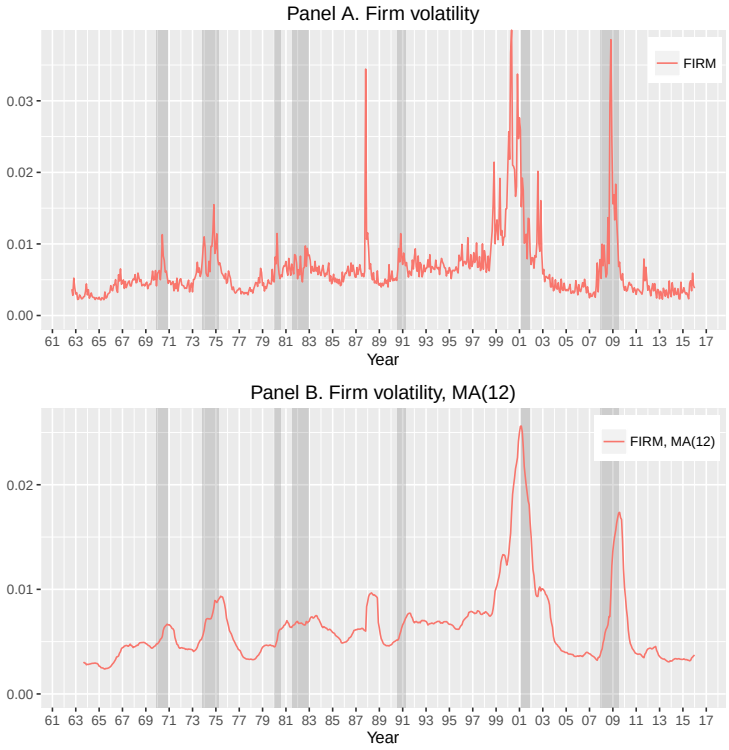

#### 2.2.3.2 Equally-weighted



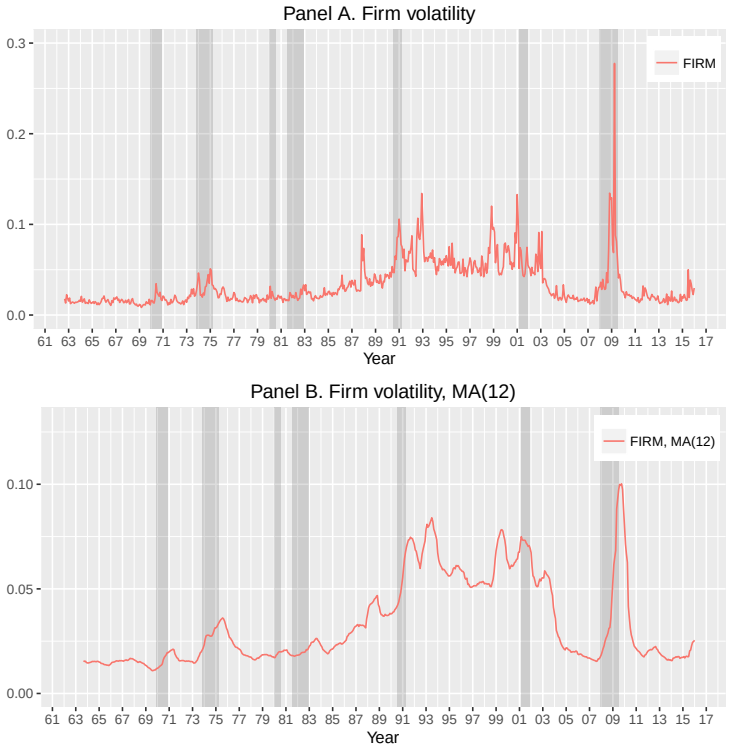
## 2.3 FIRM

### 2.3.1 SIC-49

#### 2.3.1.1 Value-weighted

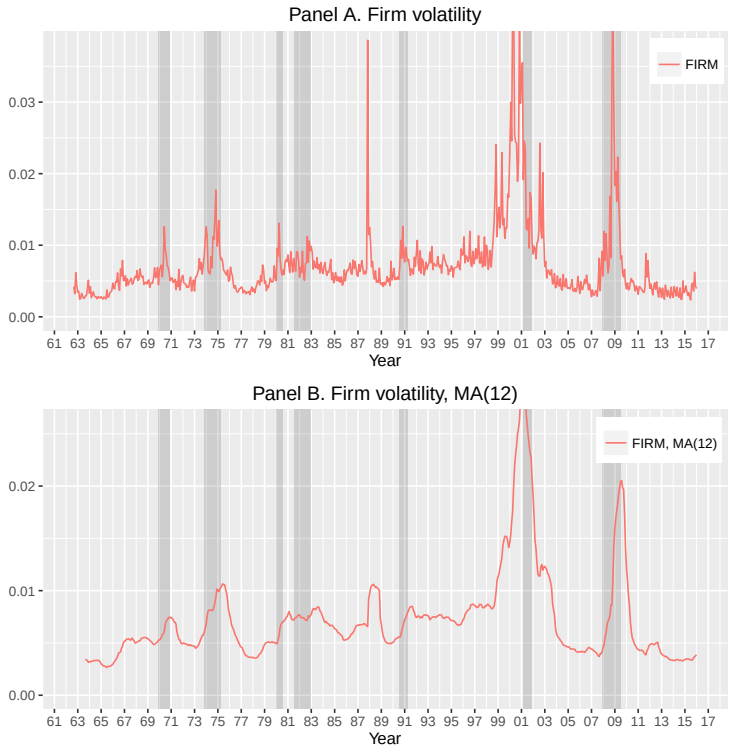



#### 2.3.1.2 Equally-weighted

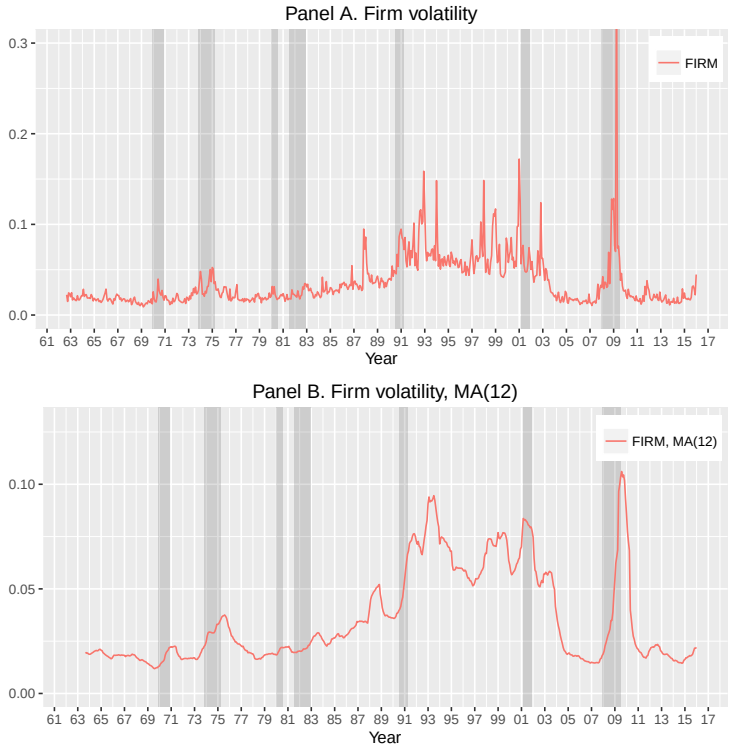


### 2.3.2 SIC-10

#### 2.3.2.1 Value-weighted

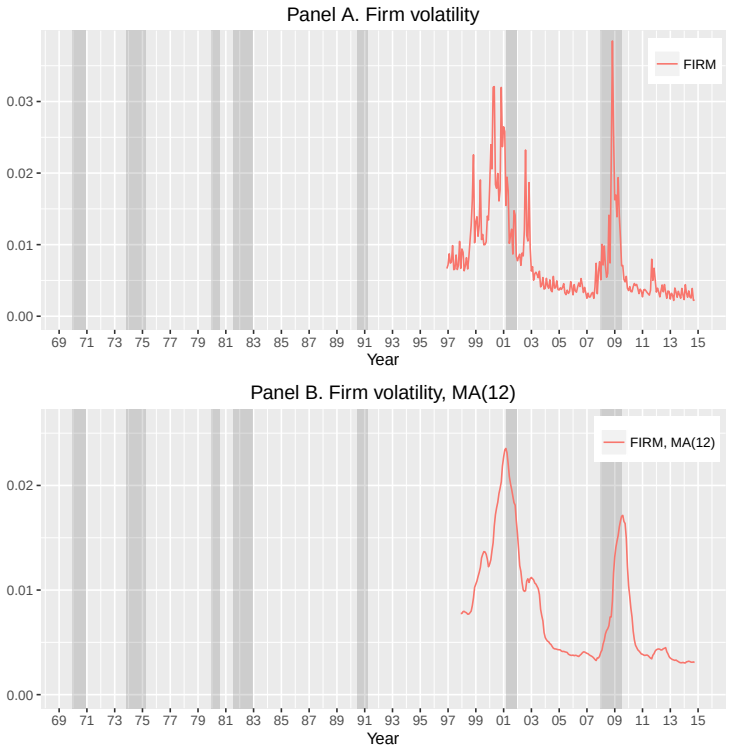



#### 2.3.2.2 Equally-weighted

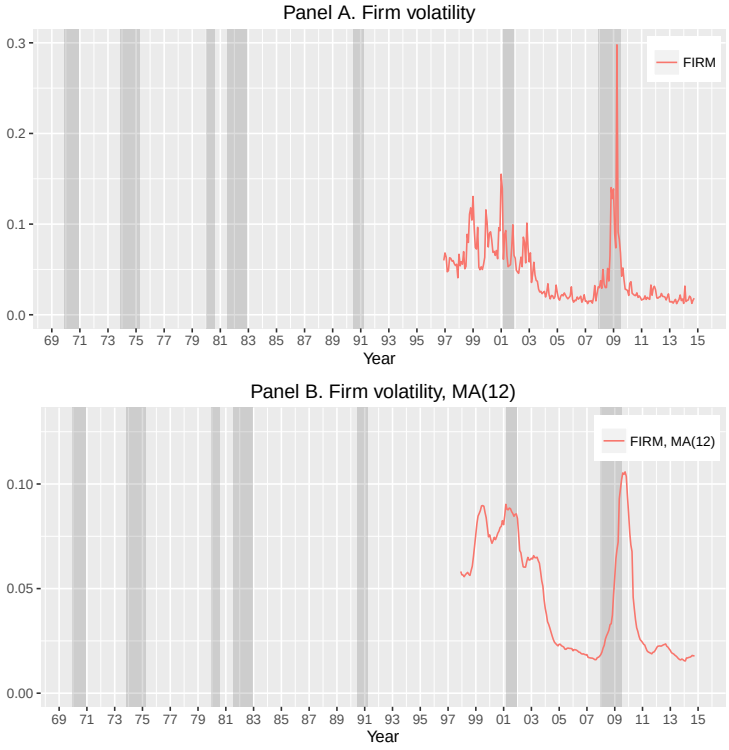


### 2.3.3 FIC-25

#### 2.3.3.1 Value-weighted




#### 2.3.3.2 Equally-weighted



# Appendix B

# Descriptives

## 1 Basic descriptives of the aggregate variables

### 1.1 SIC-49

| Period | Series | Mean ($10^3$) | Std. Dev. ($10^3$) | Std. Dev. detrended ($10^3$) | Linear Trend ($10^6$) | t-statistic |
|---|---|---|---|---|---|---|
| 07:1963–12:2015 | MKTvw | 2.11 | 4.24 | 4.15 | 4.61 | 5.06 |
| | MKTew | 1.67 | 3.42 | 3.34 | 4.06 | 5.54 |
| | INDvw | 1.25 | 1.63 | 1.56 | 2.55 | 7.47 |
| | INDew | 1.47 | 1.17 | 1.08 | 2.58 | 10.93 |
| | FIRMvw | 6.45 | 4.61 | 4.54 | 4.25 | 4.27 |
| | FIRMew | 33.59 | 24.70 | 23.48 | 42.23 | 8.20 |
| 07:1963–12:1997 | MKTvw | 1.41 | 3.02 | 3.02 | 1.42 | 1.15 |
| | MKTew | 1.01 | 2.12 | 2.12 | -1.15 | -1.31 |
| | INDvw | 0.78 | 0.48 | 0.47 | 0.79 | 4.09 |
| | INDew | 1.09 | 0.48 | 0.47 | 0.96 | 4.98 |
| | FIRMvw | 5.78 | 2.38 | 2.16 | 8.41 | 9.46 |
| | FIRMew | 31.25 | 20.43 | 13.35 | 129.25 | 23.51 |
| 01:1998–12:2015 | MKTvw | 3.46 | 5.67 | 5.67 | -4.97 | -0.80 |
| | MKTew | 2.95 | 4.81 | 4.79 | 5.25 | 1.00 |
| | INDvw | 2.15 | 2.46 | 2.28 | -14.86 | -5.96 |
| | INDew | 2.19 | 1.67 | 1.67 | -1.04 | -0.57 |
| | FIRMvw | 7.72 | 6.98 | 6.02 | -56.61 | -8.60 |
| | FIRMew | 38.08 | 30.87 | 27.46 | -225.71 | -7.52 |

### 1.2 SIC-10

| Period | Series | Mean ($10^3$) | Std. Dev. ($10^3$) | Std. Dev. detrended ($10^3$) | Linear Trend ($10^6$) | t-statistic |
|---|---|---|---|---|---|---|
| 07:1963–12:2015 | MKTvw | 2.11 | 4.24 | 4.15 | 4.60 | 5.06 |
| | MKTew | 1.67 | 3.43 | 3.35 | 4.06 | 5.53 |
| | INDvw | 0.39 | 0.72 | 0.67 | 1.36 | 9.20 |
| | INDew | 2.69 | 9.42 | 9.19 | 11.48 | 5.70 |
| | FIRMvw | 7.28 | 5.53 | 5.44 | 5.23 | 4.38 |
| | FIRMew | 35.80 | 28.46 | 27.51 | 39.96 | 6.62 |
| 07:1963–12:1997 | MKTvw | 1.41 | 3.02 | 3.02 | 1.42 | 1.15 |
| | MKTew | 1.01 | 2.12 | 2.12 | -1.15 | -1.32 |
| | INDvw | 0.17 | 0.15 | 0.14 | 0.48 | 8.45 |
| | INDew | 1.10 | 1.24 | 1.23 | 1.44 | 2.86 |
| | FIRMvw | 6.40 | 2.69 | 2.48 | 8.72 | 8.55 |
| | FIRMew | 34.31 | 23.44 | 16.21 | 141.56 | 21.21 |
| 01:1998–12:2015 | MKTvw | 3.46 | 5.68 | 5.67 | -5.01 | -0.81 |
| | MKTew | 2.95 | 4.82 | 4.81 | 5.20 | 0.99 |
| | INDvw | 0.81 | 1.09 | 1.07 | -3.65 | -3.12 |
| | INDew | 5.74 | 15.58 | 15.48 | 27.53 | 1.63 |
| | FIRMvw | 8.98 | 8.43 | 7.23 | -69.34 | -8.77 |
| | FIRMew | 38.65 | 36.07 | 32.90 | -236.69 | -6.58 |

### 1.3 FIC-25

| Period | Series | Mean ($10^3$) | Std. Dev. ($10^3$) | Std. Dev. detrended ($10^3$) | Linear Trend ($10^6$) | t-statistic |
|---|---|---|---|---|---|---|
| 07:1963–12:2015 | MKTvw | 3.42 | 5.68 | 5.68 | 1.27 | 0.20 |
| | MKTew | 3.06 | 5.07 | 5.02 | 11.04 | 2.00 |
| | INDvw | 1.91 | 2.30 | 2.18 | -11.79 | -4.92 |
| | INDew | 0.92 | 0.79 | 0.77 | -2.92 | -3.43 |
| | FIRMvw | 7.98 | 6.52 | 5.76 | -49.15 | -7.75 |
| | FIRMew | 44.68 | 35.18 | 30.57 | -279.81 | -8.31 |
| 07:1963–12:1997 | MKTvw | 1.95 | 1.80 | 1.59 | 199.86 | 1.82 |
| | MKTew | 0.93 | 1.22 | 1.10 | 126.64 | 1.67 |
| | INDvw | 1.01 | 0.26 | 0.24 | 22.68 | 1.36 |
| | INDew | 0.63 | 0.13 | 0.13 | -3.96 | -0.45 |
| | FIRMvw | 7.80 | 1.35 | 1.31 | 75.86 | 0.84 |
| | FIRMew | 57.56 | 7.73 | 7.48 | -461.08 | -0.89 |
| 01:1998–12:2015 | MKTvw | 3.52 | 5.85 | 5.85 | -1.78 | -0.25 |
| | MKTew | 3.21 | 5.20 | 5.17 | 8.74 | 1.39 |
| | INDvw | 1.97 | 2.36 | 2.16 | -16.43 | -6.24 |
| | INDew | 0.94 | 0.82 | 0.78 | -4.22 | -4.45 |
| | FIRMvw | 7.99 | 6.73 | 5.74 | -60.56 | -8.66 |
| | FIRMew | 43.78 | 36.16 | 31.22 | -313.64 | -8.24 |

## 2 Correlations of the aggregate variables and factors

### 2.1 SIC-49

| Period | Series | MktRF | SMB | HML | RMW | CMA | MKTvw | MKTew | INDvw | INDew | FIRMvw | FIRMew |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 07:1963–12:2015 | MktRF | 1 | | | | | | | | | | |
| | SMB | 0.279 | 1 | | | | | | | | | |
| | HML | -0.298 | -0.114 | 1 | | | | | | | | |
| | RMW | -0.204 | -0.362 | 0.086 | 1 | | | | | | | |
| | CMA | -0.387 | -0.112 | 0.702 | -0.087 | 1 | | | | | | |
| | MKTvw | -0.331 | -0.188 | -0.01 | 0.136 | 0.095 | 1 | | | | | |
| | MKTew | -0.307 | -0.166 | 0.001 | 0.119 | 0.078 | 0.937 | 1 | | | | |
| | INDvw | -0.171 | -0.056 | 0.06 | 0.151 | 0.131 | 0.668 | 0.643 | 1 | | | |
| | INDew | -0.124 | -0.02 | -0.041 | 0.085 | 0.031 | 0.697 | 0.735 | 0.777 | 1 | | |
| | FIRMvw | -0.177 | -0.112 | 0.059 | 0.138 | 0.149 | 0.665 | 0.578 | 0.909 | 0.66 | 1 | |
| | FIRMew | 0.021 | -0.006 | -0.055 | 0.036 | -0.016 | 0.445 | 0.435 | 0.589 | 0.665 | 0.655 | 1 |
| 07:1963–12:1997 | MktRF | 1 | | | | | | | | | | |
| | SMB | 0.297 | 1 | | | | | | | | | |
| | HML | -0.368 | -0.067 | 1 | | | | | | | | |
| | RMW | 0.083 | -0.204 | -0.504 | 1 | | | | | | | |
| | CMA | -0.424 | -0.189 | 0.752 | -0.518 | 1 | | | | | | |
| | MKTvw | -0.316 | -0.218 | 0.096 | -0.003 | 0.114 | 1 | | | | | |
| | MKTew | -0.395 | -0.232 | 0.143 | -0.013 | 0.131 | 0.926 | 1 | | | | |
| | INDvw | -0.153 | -0.151 | 0.141 | -0.108 | 0.176 | 0.761 | 0.719 | 1 | | | |
| | INDew | -0.039 | 0.004 | 0.006 | -0.084 | 0.025 | 0.417 | 0.463 | 0.612 | 1 | | |
| | FIRMvw | -0.159 | -0.209 | 0.109 | -0.014 | 0.146 | 0.776 | 0.702 | 0.908 | 0.627 | 1 | |
| | FIRMew | 0.077 | -0.025 | -0.037 | 0.062 | -0.045 | 0.181 | 0.104 | 0.347 | 0.664 | 0.521 | 1 |
| 01:1998–12:2015 | MktRF | 1 | | | | | | | | | | |
| | SMB | 0.223 | 1 | | | | | | | | | |
| | HML | -0.221 | -0.179 | 1 | | | | | | | | |
| | RMW | -0.467 | -0.53 | 0.522 | 1 | | | | | | | |
| | CMA | -0.345 | -0.017 | 0.651 | 0.265 | 1 | | | | | | |
| | MKTvw | -0.387 | -0.176 | -0.071 | 0.207 | 0.093 | 1 | | | | | |
| | MKTew | -0.298 | -0.14 | -0.066 | 0.173 | 0.058 | 0.941 | 1 | | | | |
| | INDvw | -0.26 | -0.05 | 0.087 | 0.219 | 0.174 | 0.679 | 0.621 | 1 | | | |
| | INDew | -0.222 | -0.036 | -0.04 | 0.135 | 0.05 | 0.786 | 0.788 | 0.751 | 1 | | |
| | FIRMvw | -0.223 | -0.083 | 0.058 | 0.195 | 0.178 | 0.62 | 0.514 | 0.937 | 0.65 | 1 | |
| | FIRMew | -0.03 | 0.008 | -0.057 | 0.023 | 0.012 | 0.59 | 0.589 | 0.726 | 0.728 | 0.741 | 1 |

## 2.2 SIC-10

| Period | Series | MktRF | SMB | HML | RMW | CMA | MKTvw | MKTew | INDvw | INDew | FIRMvw | FIRMew |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 07:1963–12:2015 | MktRF | 1 | | | | | | | | | | |
| | SMB | 0.279 | 1 | | | | | | | | | |
| | HML | -0.298 | -0.114 | 1 | | | | | | | | |
| | RMW | -0.204 | -0.362 | 0.086 | 1 | | | | | | | |
| | CMA | -0.387 | -0.112 | 0.702 | -0.087 | 1 | | | | | | |
| | MKTvw | -0.331 | -0.188 | -0.011 | 0.136 | 0.095 | 1 | | | | | |
| | MKTew | -0.306 | -0.166 | 0.001 | 0.118 | 0.077 | 0.937 | 1 | | | | |
| | INDvw | -0.183 | -0.057 | 0.033 | 0.15 | 0.101 | 0.694 | 0.702 | 1 | | | |
| | INDew | -0.006 | 0.033 | -0.082 | -0.034 | -0.006 | 0.305 | 0.361 | 0.351 | 1 | | |
| | FIRMvw | -0.175 | -0.102 | 0.063 | 0.14 | 0.151 | 0.66 | 0.578 | 0.823 | 0.188 | 1 | |
| | FIRMew | 0.042 | -0.003 | -0.023 | 0.04 | -0.007 | 0.402 | 0.408 | 0.518 | 0.226 | 0.604 | 1 |
| 07:1963–12:1997 | MktRF | 1 | | | | | | | | | | |
| | SMB | 0.297 | 1 | | | | | | | | | |
| | HML | -0.368 | -0.067 | 1 | | | | | | | | |
| | RMW | 0.083 | -0.204 | -0.504 | 1 | | | | | | | |
| | CMA | -0.424 | -0.189 | 0.752 | -0.518 | 1 | | | | | | |
| | MKTvw | -0.316 | -0.218 | 0.096 | -0.003 | 0.114 | 1 | | | | | |
| | MKTew | -0.395 | -0.232 | 0.142 | -0.013 | 0.131 | 0.927 | 1 | | | | |
| | INDvw | -0.217 | -0.196 | 0.121 | 0.001 | 0.131 | 0.791 | 0.725 | 1 | | | |
| | INDew | -0.043 | -0.007 | 0.016 | 0.035 | -0.032 | 0.169 | 0.207 | 0.238 | 1 | | |
| | FIRMvw | -0.156 | -0.202 | 0.115 | -0.031 | 0.154 | 0.779 | 0.71 | 0.914 | 0.232 | 1 | |
| | FIRMew | 0.078 | -0.023 | -0.007 | 0.072 | -0.034 | 0.169 | 0.097 | 0.441 | 0.528 | 0.472 | 1 |
| 01:1998–12:2015 | MktRF | 1 | | | | | | | | | | |
| | SMB | 0.223 | 1 | | | | | | | | | |
| | HML | -0.221 | -0.179 | 1 | | | | | | | | |
| | RMW | -0.467 | -0.53 | 0.522 | 1 | | | | | | | |
| | CMA | -0.345 | -0.017 | 0.651 | 0.265 | 1 | | | | | | |
| | MKTvw | -0.386 | -0.176 | -0.071 | 0.207 | 0.093 | 1 | | | | | |
| | MKTew | -0.298 | -0.139 | -0.067 | 0.173 | 0.057 | 0.941 | 1 | | | | |
| | INDvw | -0.278 | -0.055 | 0.059 | 0.196 | 0.149 | 0.744 | 0.721 | 1 | | | |
| | INDew | -0.005 | 0.054 | -0.106 | -0.052 | -0.001 | 0.318 | 0.364 | 0.291 | 1 | | |
| | FIRMvw | -0.225 | -0.075 | 0.067 | 0.2 | 0.18 | 0.616 | 0.514 | 0.838 | 0.147 | 1 | |
| | FIRMew | 0.02 | 0.007 | -0.017 | 0.025 | 0.022 | 0.52 | 0.541 | 0.617 | 0.228 | 0.676 | 1 |

## 2.3 FIC-25

| Period | Series | MktRF | SMB | HML | RMW | CMA | MKTvw | MKTew | INDvw | INDew | FIRMvw | FIRMew |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 07:1963–12:2015 | MktRF | 1 | | | | | | | | | | |
| | SMB | 0.224 | 1 | | | | | | | | | |
| | HML | -0.219 | -0.192 | 1 | | | | | | | | |
| | RMW | -0.468 | -0.533 | 0.532 | 1 | | | | | | | |
| | CMA | -0.355 | -0.019 | 0.648 | 0.266 | 1 | | | | | | |
| | MKTvw | -0.387 | -0.177 | -0.092 | 0.201 | 0.078 | 1 | | | | | |
| | MKTew | -0.304 | -0.142 | -0.085 | 0.168 | 0.047 | 0.948 | 1 | | | | |
| | INDvw | -0.266 | -0.041 | 0.098 | 0.227 | 0.186 | 0.603 | 0.543 | 1 | | | |
| | INDew | -0.151 | 0.001 | 0.014 | 0.128 | 0.084 | 0.69 | 0.694 | 0.899 | 1 | | |
| | FIRMvw | -0.241 | -0.086 | 0.023 | 0.191 | 0.163 | 0.626 | 0.532 | 0.937 | 0.863 | 1 | |
| | FIRMew | -0.01 | 0.029 | -0.091 | -0.008 | -0.011 | 0.54 | 0.535 | 0.718 | 0.823 | 0.795 | 1 |
| 07:1963–12:1997 | MktRF | 1 | | | | | | | | | | |
| | SMB | -0.288 | 1 | | | | | | | | | |
| | HML | -0.688 | -0.176 | 1 | | | | | | | | |
| | RMW | 0.272 | -0.828 | -0.086 | 1 | | | | | | | |
| | CMA | -0.703 | -0.184 | 0.84 | 0.1 | 1 | | | | | | |
| | MKTvw | -0.409 | -0.031 | 0.154 | 0.009 | 0.237 | 1 | | | | | |
| | MKTew | -0.416 | -0.071 | 0.19 | 0.053 | 0.312 | 0.972 | 1 | | | | |
| | INDvw | -0.392 | -0.223 | 0.26 | 0.23 | 0.237 | 0.638 | 0.64 | 1 | | | |
| | INDew | -0.118 | -0.162 | 0.082 | 0.291 | 0.131 | 0.335 | 0.443 | 0.63 | 1 | | |
| | FIRMvw | -0.129 | -0.448 | 0.142 | 0.371 | 0.127 | 0.605 | 0.603 | 0.828 | 0.652 | 1 | |
| | FIRMew | 0.253 | 0.219 | -0.388 | 0.04 | -0.381 | -0.123 | -0.076 | 0.206 | 0.705 | 0.292 | 1 |
| 01:1998–12:2015 | MktRF | 1 | | | | | | | | | | |
| | SMB | 0.234 | 1 | | | | | | | | | |
| | HML | -0.22 | -0.194 | 1 | | | | | | | | |
| | RMW | -0.476 | -0.532 | 0.533 | 1 | | | | | | | |
| | CMA | -0.353 | -0.023 | 0.648 | 0.268 | 1 | | | | | | |
| | MKTvw | -0.387 | -0.18 | -0.091 | 0.203 | 0.078 | 1 | | | | | |
| | MKTew | -0.304 | -0.144 | -0.084 | 0.17 | 0.047 | 0.948 | 1 | | | | |
| | INDvw | -0.266 | -0.042 | 0.098 | 0.23 | 0.186 | 0.602 | 0.542 | 1 | | | |
| | INDew | -0.15 | 0 | 0.014 | 0.13 | 0.084 | 0.69 | 0.694 | 0.9 | 1 | | |
| | FIRMvw | -0.242 | -0.087 | 0.023 | 0.192 | 0.163 | 0.626 | 0.532 | 0.937 | 0.863 | 1 | |
| | FIRMew | -0.011 | 0.029 | -0.092 | -0.01 | -0.012 | 0.544 | 0.539 | 0.722 | 0.826 | 0.797 | 1 |

# 3 Autocorrelation structure of the aggregate variables and factors

SIC-49:

| Period | Series | $\rho^1$ | $\rho^2$ | $\rho^3$ | $\rho^{12}$ |
|---|---|---|---|---|---|
| 07:1963–12:2015 | MktRF | 0.07 | -0.04 | 0.03 | 0.02 |
| | SMB | 0.06 | 0.05 | -0.07 | 0.04 |
| | HML | 0.16 | 0.04 | 0.04 | 0.05 |
| | RMW | 0.17 | 0.04 | -0.04 | 0.10 |
| | CMA | 0.13 | 0.05 | 0.06 | 0.05 |
| | MKTvw | 0.53 | 0.36 | 0.27 | 0.08 |
| | MKTew | 0.56 | 0.42 | 0.33 | 0.09 |
| | INDvw | 0.81 | 0.75 | 0.75 | 0.38 |
| | INDew | 0.77 | 0.71 | 0.61 | 0.25 |
| | FIRMvw | 0.80 | 0.72 | 0.69 | 0.41 |
| | FIRMew | 0.80 | 0.76 | 0.74 | 0.53 |
| 07:1963–12:1997 | MktRF | 0.05 | -0.02 | -0.01 | 0.00 |
| | SMB | 0.17 | 0.03 | -0.05 | 0.11 |
| | HML | 0.18 | 0.04 | -0.02 | 0.02 |
| | RMW | 0.16 | 0.10 | -0.02 | 0.04 |
| | CMA | 0.18 | 0.06 | -0.03 | 0.04 |
| | MKTvw | 0.16 | 0.12 | 0.12 | 0.01 |
| | MKTew | 0.13 | 0.06 | 0.05 | 0.01 |
| | INDvw | 0.44 | 0.41 | 0.35 | 0.05 |
| | INDew | 0.58 | 0.55 | 0.47 | 0.29 |
| | FIRMvw | 0.55 | 0.51 | 0.46 | 0.22 |
| | FIRMew | 0.91 | 0.87 | 0.83 | 0.77 |
| 01:1998–12:2015 | MktRF | 0.11 | -0.06 | 0.08 | 0.07 |
| | SMB | -0.09 | 0.07 | -0.10 | -0.05 |
| | HML | 0.13 | 0.05 | 0.10 | 0.09 |
| | RMW | 0.18 | 0.01 | -0.05 | 0.14 |
| | CMA | 0.06 | 0.03 | 0.18 | 0.07 |
| | MKTvw | 0.70 | 0.43 | 0.29 | 0.03 |
| | MKTew | 0.67 | 0.49 | 0.36 | 0.02 |
| | INDvw | 0.79 | 0.73 | 0.72 | 0.28 |
| | INDew | 0.74 | 0.66 | 0.52 | 0.06 |
| | FIRMvw | 0.84 | 0.75 | 0.72 | 0.42 |
| | FIRMew | 0.71 | 0.65 | 0.65 | 0.28 |

SIC-10

| Period | Series | $\rho^1$ | $\rho^2$ | $\rho^3$ | $\rho^{12}$ |
|---|---|---|---|---|---|
| 07:1963–12:2015 | MktRF | 0.07 | -0.04 | 0.03 | 0.02 |
| | SMB | 0.06 | 0.05 | -0.07 | 0.04 |
| | HML | 0.16 | 0.04 | 0.04 | 0.05 |
| | RMW | 0.17 | 0.04 | -0.04 | 0.10 |
| | CMA | 0.13 | 0.05 | 0.06 | 0.05 |
| | MKTvw | 0.53 | 0.36 | 0.27 | 0.08 |
| | MKTew | 0.56 | 0.42 | 0.33 | 0.09 |
| | INDvw | 0.80 | 0.79 | 0.72 | 0.29 |
| | INDew | 0.30 | 0.42 | 0.35 | 0.14 |
| | FIRMvw | 0.80 | 0.73 | 0.71 | 0.42 |
| | FIRMew | 0.71 | 0.66 | 0.65 | 0.47 |
| 07:1963–12:1997 | MktRF | 0.05 | -0.02 | -0.01 | 0.00 |
| | SMB | 0.17 | 0.03 | -0.05 | 0.11 |
| | HML | 0.18 | 0.04 | -0.02 | 0.02 |
| | RMW | 0.16 | 0.10 | -0.02 | 0.04 |
| | CMA | 0.18 | 0.06 | -0.03 | 0.04 |
| | MKTvw | 0.16 | 0.12 | 0.12 | 0.01 |
| | MKTew | 0.13 | 0.06 | 0.05 | 0.01 |
| | INDvw | 0.43 | 0.41 | 0.33 | 0.12 |
| | INDew | 0.36 | 0.27 | 0.29 | 0.16 |
| | FIRMvw | 0.54 | 0.50 | 0.45 | 0.19 |
| | FIRMew | 0.84 | 0.79 | 0.77 | 0.68 |
| 01:1998–12:2015 | MktRF | 0.11 | -0.06 | 0.08 | 0.07 |
| | SMB | -0.09 | 0.07 | -0.10 | -0.05 |
| | HML | 0.13 | 0.05 | 0.10 | 0.09 |
| | RMW | 0.18 | 0.01 | -0.05 | 0.14 |
| | CMA | 0.06 | 0.03 | 0.18 | 0.07 |
| | MKTvw | 0.70 | 0.43 | 0.29 | 0.03 |
| | MKTew | 0.67 | 0.49 | 0.36 | 0.02 |
| | INDvw | 0.77 | 0.75 | 0.68 | 0.14 |
| | INDew | 0.26 | 0.39 | 0.31 | 0.08 |
| | FIRMvw | 0.84 | 0.75 | 0.74 | 0.42 |
| | FIRMew | 0.58 | 0.54 | 0.54 | 0.24 |

FIC-25:

| Period | Series | $\rho^1$ | $\rho^2$ | $\rho^3$ | $\rho^{12}$ |
|---|---|---|---|---|---|
| 07:1963–12:2015 | MktRF | 0.10 | -0.03 | 0.07 | 0.03 |
| | SMB | -0.07 | 0.05 | -0.09 | -0.06 |
| | HML | 0.12 | 0.03 | 0.09 | 0.07 |
| | RMW | 0.18 | 0.01 | -0.05 | 0.12 |
| | CMA | 0.06 | 0.02 | 0.15 | 0.06 |
| | MKTvw | 0.70 | 0.43 | 0.29 | 0.02 |
| | MKTew | 0.67 | 0.49 | 0.36 | 0.02 |
| | INDvw | 0.80 | 0.74 | 0.76 | 0.31 |
| | INDew | 0.76 | 0.66 | 0.61 | 0.22 |
| | FIRMvw | 0.83 | 0.74 | 0.73 | 0.40 |
| | FIRMew | 0.72 | 0.67 | 0.66 | 0.35 |
| 07:1963–12:1997 | MktRF | -0.33 | 0.17 | -0.23 | -0.13 |
| | SMB | -0.10 | -0.12 | 0.08 | -0.07 |
| | HML | 0.01 | -0.24 | -0.28 | -0.13 |
| | RMW | -0.05 | 0.06 | 0.01 | -0.03 |
| | CMA | 0.16 | 0.18 | -0.29 | -0.01 |
| | MKTvw | 0.06 | -0.00 | -0.05 | -0.21 |
| | MKTew | 0.05 | 0.04 | -0.09 | -0.15 |
| | INDvw | -0.18 | 0.14 | -0.08 | -0.22 |
| | INDew | -0.35 | 0.05 | 0.06 | -0.05 |
| | FIRMvw | -0.39 | -0.10 | 0.41 | -0.04 |
| | FIRMew | -0.01 | -0.25 | -0.21 | -0.16 |
| 01:1998–12:2015 | MktRF | 0.12 | -0.05 | 0.08 | 0.06 |
| | SMB | -0.07 | 0.06 | -0.11 | -0.05 |
| | HML | 0.13 | 0.04 | 0.10 | 0.10 |
| | RMW | 0.18 | 0.00 | -0.05 | 0.13 |
| | CMA | 0.05 | 0.02 | 0.18 | 0.07 |
| | MKTvw | 0.71 | 0.43 | 0.29 | 0.02 |
| | MKTew | 0.67 | 0.49 | 0.35 | 0.01 |
| | INDvw | 0.80 | 0.74 | 0.76 | 0.30 |
| | INDew | 0.76 | 0.66 | 0.61 | 0.22 |
| | FIRMvw | 0.84 | 0.74 | 0.73 | 0.40 |
| | FIRMew | 0.72 | 0.67 | 0.66 | 0.34 |

# 4 Correlations between IIND and AIFIRM

For each tabular, the two different columns represent the correlations between IINDvw to AIFIRMvw and IINDew to AIFIRMew, respectively. The averages are not weighted (simple means).

## 4.1 SIC-49

| Industry | Value-Weighted | Equally-Weighted |
|---|---|---|
| Aero | 0.35 | 0.77 |
| Agric | 0.57 | 0.77 |
| Autos | 0.77 | 0.76 |
| Banks | 0.82 | 0.39 |
| Beer | 0.17 | 0.87 |
| BldMt | 0.49 | 0.93 |
| Books | 0.58 | 0.68 |
| Boxes | 0.63 | 0.83 |
| BusSv | 0.79 | 0.41 |
| Chems | 0.66 | 0.89 |
| Chips | 0.75 | 0.51 |
| Clths | 0.58 | 0.62 |
| Cnstr | 0.41 | 0.53 |
| Coal | 0.41 | 0.47 |
| Comps | 0.69 | 0.86 |
| Drugs | 0.79 | 0.51 |
| EleEq | 0.64 | 0.58 |
| Enrgy | 0.53 | 0.39 |
| FabPr | 0.48 | 0.82 |
| Fin | 0.80 | 0.52 |
| Food | 0.61 | 0.83 |
| Fun | 0.56 | 0.77 |
| Gold | 0.47 | 0.27 |
| Guns | 0.42 | 0.82 |
| Hshld | 0.73 | 0.77 |
| Insur | 0.74 | 0.54 |
| LabEq | 0.83 | 0.65 |
| Mach | 0.75 | 0.54 |
| Meals | 0.67 | 0.45 |
| MedEq | 0.65 | 0.26 |
| Mines | 0.62 | 0.60 |
| Misc | 0.28 | 0.39 |
| NotInIndustry | 0.60 | 0.84 |
| Paper | 0.68 | 0.85 |
| PerSv | 0.53 | 0.76 |
| RlEst | 0.66 | 0.73 |
| Rtail | 0.65 | 0.42 |
| Rubbr | 0.63 | 0.73 |
| Ships | 0.50 | 0.82 |
| Smoke | 0.45 | 0.98 |
| Soda | 0.74 | 0.63 |
| Steel | 0.72 | 0.48 |
| Telcm | 0.82 | 0.70 |
| Toys | 0.67 | 0.77 |
| Trans | 0.70 | 0.52 |
| Txtls | 0.58 | 0.75 |
| Util | 0.82 | 0.46 |
| WhlSl | 0.74 | 0.40 |
| Hlth | 0.50 | -0.09 |
| Average | 0.62 | 0.63 |

## 4.2 SIC-10

| Division | Value-Weighted | Equally-Weighted |
|---|---|---|
| Division.A | 0.08 | 0.24 |
| Division.B | 0.42 | 0.38 |
| Division.C | 0.41 | 0.53 |
| Division.D | 0.74 | 0.47 |
| Division.E | 0.86 | 0.65 |
| Division.F | 0.74 | 0.40 |
| Division.G | 0.63 | 0.38 |
| Division.H | 0.85 | 0.48 |
| Division.I | 0.82 | 0.40 |
| Division.J | -0.03 | 0.01 |
| Average | 0.55 | 0.40 |

## 4.3 FIC-25

| Industry | Value-Weighted | Equally-Weighted |
|---|---|---|
| 1 | 0.81 | 0.62 |
| 2 | 0.83 | 0.63 |
| 3 | 0.82 | 0.70 |
| 4 | 0.76 | 0.73 |
| 5 | 0.72 | 0.51 |
| 6 | 0.72 | 0.50 |
| 7 | 0.78 | 0.52 |
| 8 | 0.81 | 0.54 |
| 9 | 0.91 | 0.60 |
| 10 | 0.57 | 0.69 |
| 11 | 0.72 | 0.90 |
| 12 | 0.88 | 0.87 |
| 13 | 0.80 | 0.76 |
| 14 | 0.82 | 0.91 |
| 15 | 0.88 | 0.62 |
| 16 | 0.74 | 0.74 |
| 17 | 0.78 | 0.80 |
| 18 | 0.83 | 0.74 |
| 19 | 0.68 | 0.78 |
| 20 | 0.77 | 0.59 |
| 21 | 0.35 | 0.62 |
| 22 | 0.67 | 0.62 |
| 23 | 0.79 | 0.88 |
| 24 | 0.69 | 0.53 |
| 25 | 0.86 | 0.73 |
| Average | 0.76 | 0.69 |

# Appendix C

# Extended tables

In this chapter, I present extended tables with the results of the Fama-MacBeth cross-sectional regressions. Each table contains the estimations of the risk premia, the t-statistics in parentheses, and the coefficients of determination in the right-most column.

Section 1 contains the Fama-MacBeth, Shanken and Newey-West t-statistics for the two-tailed test of the null hypothesis, which for the first section is $\lambda_{\beta_{IND}} = 0$. To save space and time, for the rest of the sections, I only include the Newey-West t-statistics for the first section only, Nevertheless, the picture does not change. The Newey-West t-statistics that were used in the thesis were (far, in same cases) more conservative than the Fama-MacBeth and Shanken-adjusted. Last, the Newey-West for the SIC-based industry classifications are calculated with a lag of 5, and for the FIC-based classification with a lag of 4, because of the shorter length of the dataset.

The first section includes the tested specifications for testing Hypothesis 1, the second corresponds to Hypothhesis 2, and the third section tests Hypothesis 3.

The first subsection corresponds to the SIC-49 dataset, the second to the SIC-10 and the third to the FIC-25.

The structure of each industry classification subsection is as follows:

1. CRSP database, Fama-MacBeth t-statistics, does **not** control for $\ln ME$ and $\ln BM$.
2. CRSP database, Shanken t-statistics, does **not** control for $\ln ME$ and $\ln BM$.
3. CRSP database, Newey-West t-statistics, does **not** control for $\ln ME$ and $\ln BM$.
4. Compustat database, Newey-West t-statistics, does **not** control for $\ln ME$ and $\ln BM$. This is used to compare the different datasets.
5. Compustat database, Newey-West t-statistics, **does** control for $\ln ME$ and $\ln BM$.

Each one of 1–5 includes both weighting-schemes, first including the value-weighted variables and second the equally-weighted.

# 1 Testing hypothesis 1, $\lambda_{\beta_{IND}} = 0$

## 1.1 SIC-49 industries

### 1.1.1 Fama-MacBeth t-statistics

| # | $\hat{\lambda}_{\text{intercept}}$ | $\hat{\lambda}_{\beta_{MktRF}}$ | $\hat{\lambda}_{\beta_{SMB}}$ | $\hat{\lambda}_{\beta_{HML}}$ | $\hat{\lambda}_{\beta_{RMW}}$ | $\hat{\lambda}_{\beta_{CMA}}$ | $\hat{\lambda}_{\beta_{INDvw}}$ | $\hat{\lambda}_{\beta_{MKTvw}}$ | $\hat{\lambda}_{\beta_{FIRMvw}}$ | $R^2$, $\bar{R}^2$ (in %) |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.896 | -0.104 | | | | | | | | 1.595 |
| | (5.838)*** | (-0.846) | | | | | | | | (1.569) |
| 2 | 0.853 | -0.073 | | | | | -0.966 | | | 1.896 |
| | (5.556)*** | (-0.609) | | | | | (2.054)** | | | (1.842) |
| 3 | 0.831 | -0.074 | | | | | | -3.62 | | 1.918 |
| | (5.514)*** | (-0.616) | | | | | | (3.024)*** | | (1.865) |
| 4 | 0.845 | -0.073 | | | | | | | -3.365 | 1.911 |
| | (5.567)*** | (-0.598) | | | | | | | (2.713)*** | (1.857) |
| 5 | 0.839 | -0.099 | | | | | -0.87 | -3.265 | | 2.225 |
| | (5.634)*** | (-0.848) | | | | | (1.934)* | (3.003)*** | | (2.145) |
| 6 | 0.834 | -0.091 | | | | | -0.942 | | -3.083 | 2.168 |
| | (5.498)*** | (-0.792) | | | | | (2.063)** | | (2.544)** | (2.088) |
| 7 | 0.841 | -0.08 | | | | | | -3.627 | -3.14 | 2.251 |
| | (5.613)*** | (-0.683) | | | | | | (3.166)*** | (2.624)*** | (2.171) |
| 8 | 0.837 | -0.1 | | | | | -0.887 | -3.271 | -2.813 | 2.427 |
| | (5.593)*** | (-0.894) | | | | | (2.014)** | (3.105)*** | (2.436)** | (2.321) |
| 9 | 0.827 | -0.083 | -0.014 | 0.147 | | | | | | 2.753 |
| | (5.731)*** | (-0.813) | (-0.202) | (2.107)** | | | | | | (2.674) |
| 10 | 0.789 | -0.042 | -0.007 | 0.142 | | | -0.876 | | | 2.965 |
| | (5.508)*** | (-0.406) | (-0.106) | (2.023)** | | | (2.013)** | | | (2.86) |
| 11 | 0.78 | -0.042 | -0.002 | 0.15 | | | | -3.619 | | 2.938 |
| | (5.429)*** | (-0.406) | (-0.03) | (2.171)** | | | | (3.1)*** | | (2.832) |
| 12 | 0.782 | -0.041 | -0.002 | 0.145 | | | | | -3.121 | 2.969 |
| | (5.465)*** | (-0.401) | (-0.027) | (2.051)** | | | | | (2.652)*** | (2.863) |
| 13 | 0.79 | -0.049 | -0.005 | 0.143 | | | -0.823 | -3.31 | | 3.11 |
| | (5.496)*** | (-0.485) | (-0.076) | (2.083)** | | | (1.961)* | (3.231)*** | | (2.978) |
| 14 | 0.787 | -0.052 | -0.005 | 0.148 | | | -0.901 | | -2.978 | 3.133 |
| | (5.486)*** | (-0.514) | (-0.07) | (2.159)** | | | (2.08)** | | (2.6)*** | (3.001) |
| 15 | 0.78 | -0.044 | -0.001 | 0.142 | | | | -3.581 | -2.946 | 3.127 |
| | (5.435)*** | (-0.437) | (-0.01) | (2.072)** | | | | (3.22)*** | (2.584)** | (2.995) |
| 16 | 0.793 | -0.061 | -0.004 | 0.144 | | | -0.826 | -3.197 | -2.65 | 3.273 |
| | (5.514)*** | (-0.615) | (-0.06) | (2.145)** | | | (1.991)** | (3.259)*** | (2.437)** | (3.115) |
| 17 | 0.811 | -0.068 | -0.012 | 0.142 | -0.009 | 0.077 | | | | 3.098 |
| | (5.626)*** | (-0.676) | (-0.172) | (2.099)** | (-0.181) | (1.703)* | | | | (2.966) |
| 18 | 0.778 | -0.034 | -0.003 | 0.142 | -0.019 | 0.073 | -0.909 | | | 3.277 |
| | (5.429)*** | (-0.329) | (-0.045) | (2.085)** | (-0.377) | (1.616) | (2.076)** | | | (3.119) |
| 19 | 0.767 | -0.031 | -0.001 | 0.148 | -0.014 | 0.072 | | -3.681 | | 3.26 |
| | (5.342)*** | (-0.299) | (-0.011) | (2.207)** | (-0.285) | (1.629) | | (3.13)*** | | (3.102) |
| 20 | 0.771 | -0.03 | -0.001 | 0.145 | -0.021 | 0.072 | | | -3.174 | 3.28 |
| | (5.387)*** | (-0.287) | (-0.008) | (2.112)** | (-0.418) | (1.599) | | | (2.679)*** | (3.122) |
| 21 | 0.781 | -0.04 | -0.005 | 0.14 | -0.011 | 0.074 | -0.83 | -3.35 | | 3.397 |
| | (5.425)*** | (-0.395) | (-0.068) | (2.098)** | (-0.236) | (1.699)* | (1.968)** | (3.25)*** | | (3.212) |
| 22 | 0.777 | -0.039 | -0.003 | 0.145 | -0.016 | 0.075 | -0.928 | | -3.068 | 3.413 |
| | (5.412)*** | (-0.39) | (-0.044) | (2.169)** | (-0.33) | (1.685)* | (2.133)** | | (2.68)*** | (3.229) |
| 23 | 0.773 | -0.035 | -0.001 | 0.139 | -0.014 | 0.07 | | -3.566 | -2.926 | 3.419 |
| | (5.372)*** | (-0.35) | (-0.016) | (2.102)** | (-0.3) | (1.608) | | (3.224)*** | (2.565)** | (3.235) |
| 24 | 0.785 | -0.049 | -0.005 | 0.14 | -0.01 | 0.076 | -0.837 | -3.245 | -2.706 | 3.537 |
| | (5.44)*** | (-0.5) | (-0.074) | (2.148)** | (-0.213) | (1.759)* | (2.004)** | (3.268)*** | (2.483)** | (3.327) |

| # | $\hat{\lambda}_{\text{intercept}}$ | $\hat{\lambda}_{\beta_{MktRF}}$ | $\hat{\lambda}_{\beta_{SMB}}$ | $\hat{\lambda}_{\beta_{HML}}$ | $\hat{\lambda}_{\beta_{RMW}}$ | $\hat{\lambda}_{\beta_{CMA}}$ | $\hat{\lambda}_{\beta_{INDew}}$ | $\hat{\lambda}_{\beta_{MKTew}}$ | $\hat{\lambda}_{\beta_{FIRMew}}$ | $R^2$, $\bar{R}^2$ (in %) |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.896 | -0.104 | | | | | | | | 1.595 |
| | (5.838)*** | (-0.846) | | | | | | | | (1.569) |
| 2 | 0.839 | -0.05 | | | | | -0.925 | | | 1.896 |
| | (5.482)*** | (-0.415) | | | | | (3.127)*** | | | (1.842) |
| 3 | 0.834 | -0.068 | | | | | | -2.438 | | 1.873 |
| | (5.445)*** | (-0.568) | | | | | | (2.817)*** | | (1.819) |
| 4 | 0.824 | -0.031 | | | | | | | -15.257 | 1.901 |
| | (5.424)*** | (-0.252) | | | | | | | (3.966)*** | (1.848) |
| 5 | 0.851 | -0.047 | | | | | -0.831 | -2.382 | | 2.224 |
| | (5.56)*** | (-0.409) | | | | | (3.159)*** | (3.07)*** | | (2.144) |
| 6 | 0.82 | -0.037 | | | | | -0.883 | | -14.955 | 2.185 |
| | (5.385)*** | (-0.316) | | | | | (3.042)*** | | (4.005)*** | (2.105) |
| 7 | 0.833 | -0.041 | | | | | | -2.392 | -14.212 | 2.214 |
| | (5.431)*** | (-0.356) | | | | | | (3.062)*** | (4.364)*** | (2.134) |
| 8 | 0.832 | -0.038 | | | | | -0.803 | -2.355 | -13.427 | 2.477 |
| | (5.447)*** | (-0.335) | | | | | (3.129)*** | (3.111)*** | (4.185)*** | (2.371) |
| 9 | 0.827 | -0.083 | -0.014 | 0.147 | | | | | | 2.753 |
| | (5.731)*** | (-0.813) | (-0.202) | (2.107)** | | | | | | (2.674) |
| 10 | 0.77 | -0.033 | 0.004 | 0.134 | | | -0.87 | | | 2.956 |
| | (5.422)*** | (-0.324) | (0.062) | (1.902)* | | | (3.166)*** | | | (2.85) |
| 11 | 0.785 | -0.043 | -0.004 | 0.146 | | | | -2.449 | | 2.927 |
| | (5.469)*** | (-0.422) | (-0.052) | (2.13)** | | | | (3.023)*** | | (2.821) |
| 12 | 0.761 | -0.026 | 0.002 | 0.138 | | | | | -15.096 | 2.959 |
| | (5.383)*** | (-0.244) | (0.022) | (1.95)* | | | | | (4.084)*** | (2.853) |
| 13 | 0.779 | -0.037 | 0.004 | 0.133 | | | -0.791 | -2.359 | | 3.133 |
| | (5.422)*** | (-0.369) | (0.052) | (1.915)* | | | (3.206)*** | (3.344)*** | | (3.001) |
| 14 | 0.764 | -0.031 | 0.006 | 0.133 | | | -0.81 | | -14.268 | 3.149 |
| | (5.367)*** | (-0.308) | (0.091) | (1.921)* | | | (3.063)*** | | (4.243)*** | (3.018) |
| 15 | 0.773 | -0.034 | 0.004 | 0.137 | | | | -2.284 | -13.481 | 3.148 |
| | (5.391)*** | (-0.338) | (0.049) | (2.009)** | | | | (3.158)*** | (4.323)*** | (3.016) |
| 16 | 0.772 | -0.034 | 0.007 | 0.131 | | | -0.735 | -2.237 | -12.905 | 3.321 |
| | (5.357)*** | (-0.342) | (0.098) | (1.923)* | | | (3.104)*** | (3.269)*** | (4.302)*** | (3.163) |
| 17 | 0.811 | -0.068 | -0.012 | 0.142 | -0.009 | 0.077 | | | | 3.098 |
| | (5.626)*** | (-0.676) | (-0.172) | (2.099)** | (-0.181) | (1.703)* | | | | (2.966) |
| 18 | 0.761 | -0.024 | 0.004 | 0.135 | -0.014 | 0.068 | -0.874 | | | 3.273 |
| | (5.341)*** | (-0.232) | (0.063) | (1.984)** | (-0.296) | (1.495) | (3.277)*** | | | (3.115) |
| 19 | 0.772 | -0.031 | -0.001 | 0.144 | -0.012 | 0.071 | | -2.526 | | 3.253 |
| | (5.367)*** | (-0.308) | (-0.021) | (2.146)** | (-0.246) | (1.584) | | (3.102)*** | | (3.094) |
| 20 | 0.751 | -0.016 | 0.002 | 0.138 | -0.017 | 0.067 | | | -15.704 | 3.278 |
| | (5.303)*** | (-0.152) | (0.028) | (2.016)** | (-0.349) | (1.452) | | | (4.203)*** | (3.12) |
| 21 | 0.769 | -0.028 | 0.004 | 0.134 | -0.018 | 0.07 | -0.812 | -2.429 | | 3.428 |
| | (5.331)*** | (-0.28) | (0.057) | (1.983)** | (-0.368) | (1.541) | (3.27)*** | (3.435)*** | | (3.244) |
| 22 | 0.756 | -0.023 | 0.006 | 0.135 | -0.015 | 0.069 | -0.828 | | -14.604 | 3.444 |
| | (5.299)*** | (-0.226) | (0.088) | (2.009)** | (-0.312) | (1.548) | (3.186)*** | | (4.398)*** | (3.26) |
| 23 | 0.765 | -0.026 | 0.004 | 0.137 | -0.014 | 0.067 | | -2.411 | -13.948 | 3.43 |
| | (5.327)*** | (-0.255) | (0.057) | (2.058)** | (-0.289) | (1.497) | | (3.313)*** | (4.409)*** | (3.246) |
| 24 | 0.765 | -0.028 | 0.007 | 0.134 | -0.019 | 0.07 | -0.764 | -2.363 | -13.426 | 3.589 |
| | (5.294)*** | (-0.282) | (0.098) | (2.006)** | (-0.388) | (1.581) | (3.197)*** | (3.43)*** | (4.402)*** | (3.379) |

### 1.1.2 Shanken t-statistics

| # | $\hat{\lambda}_{\text{intercept}}$ | $\hat{\lambda}_{\beta_{MktRF}}$ | $\hat{\lambda}_{\beta_{SMB}}$ | $\hat{\lambda}_{\beta_{HML}}$ | $\hat{\lambda}_{\beta_{RMW}}$ | $\hat{\lambda}_{\beta_{CMA}}$ | $\hat{\lambda}_{\beta_{INDvw}}$ | $\hat{\lambda}_{\beta_{MKTvw}}$ | $\hat{\lambda}_{\beta_{FIRMvw}}$ | $R^2$, $\bar{R}^2$ (in %) |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.896 | -0.104 | | | | | | | | 1.595 |
| | (5.838)*** | (-0.825) | | | | | | | | (1.569) |
| 2 | 0.853 | -0.073 | | | | | -0.966 | | | 1.896 |
| | (5.556)*** | (-0.596) | | | | | (2.041)** | | | (1.842) |
| 3 | 0.831 | -0.074 | | | | | | -3.62 | | 1.918 |
| | (5.514)*** | (-0.603) | | | | | | (3.007)*** | | (1.865) |
| 4 | 0.845 | -0.073 | | | | | | | -3.365 | 1.911 |
| | (5.567)*** | (-0.585) | | | | | | | (2.701)*** | (1.857) |
| 5 | 0.839 | -0.099 | | | | | -0.87 | -3.265 | | 2.225 |
| | (5.634)*** | (-0.829) | | | | | (1.923)* | (2.989)*** | | (2.145) |
| 6 | 0.834 | -0.091 | | | | | -0.942 | | -3.083 | 2.168 |
| | (5.498)*** | (-0.775) | | | | | (2.05)** | | (2.535)** | (2.088) |
| 7 | 0.841 | -0.08 | | | | | | -3.627 | -3.14 | 2.251 |
| | (5.613)*** | (-0.669) | | | | | | (3.148)*** | (2.614)*** | (2.171) |
| 8 | 0.837 | -0.1 | | | | | -0.887 | -3.271 | -2.813 | 2.427 |
| | (5.593)*** | (-0.875) | | | | | (2.003)** | (3.09)*** | (2.429)** | (2.321) |
| 9 | 0.827 | -0.083 | -0.014 | 0.147 | | | | | | 2.753 |
| | (5.731)*** | (-0.797) | (-0.195) | (2.049)** | | | | | | (2.674) |
| 10 | 0.789 | -0.042 | -0.007 | 0.142 | | | -0.876 | | | 2.965 |
| | (5.508)*** | (-0.399) | (-0.103) | (1.974)** | | | (2.003)** | | | (2.86) |
| 11 | 0.78 | -0.042 | -0.002 | 0.15 | | | | -3.619 | | 2.938 |
| | (5.429)*** | (-0.4) | (-0.029) | (2.12)** | | | | (3.083)*** | | (2.832) |
| 12 | 0.782 | -0.041 | -0.002 | 0.145 | | | | | -3.121 | 2.969 |
| | (5.465)*** | (-0.395) | (-0.026) | (2.002)** | | | | | (2.643)*** | (2.863) |
| 13 | 0.79 | -0.049 | -0.005 | 0.143 | | | -0.823 | -3.31 | | 3.11 |
| | (5.496)*** | (-0.477) | (-0.074) | (2.031)** | | | (1.951)* | (3.216)*** | | (2.978) |
| 14 | 0.787 | -0.052 | -0.005 | 0.148 | | | -0.901 | | -2.978 | 3.133 |
| | (5.486)*** | (-0.505) | (-0.067) | (2.107)** | | | (2.069)** | | (2.591)*** | (3.001) |
| 15 | 0.78 | -0.044 | -0.001 | 0.142 | | | | -3.581 | -2.946 | 3.127 |
| | (5.435)*** | (-0.43) | (-0.01) | (2.022)** | | | | (3.203)*** | (2.576)** | (2.995) |
| 16 | 0.793 | -0.061 | -0.004 | 0.144 | | | -0.826 | -3.197 | -2.65 | 3.273 |
| | (5.514)*** | (-0.604) | (-0.058) | (2.092)** | | | (1.981)** | (3.244)*** | (2.43)** | (3.115) |
| 17 | 0.811 | -0.068 | -0.012 | 0.142 | -0.009 | 0.077 | | | | 3.098 |
| | (5.626)*** | (-0.663) | (-0.166) | (2.044)** | (-0.169) | (1.6) | | | | (2.966) |
| 18 | 0.778 | -0.034 | -0.003 | 0.142 | -0.019 | 0.073 | -0.909 | | | 3.277 |
| | (5.429)*** | (-0.324) | (-0.044) | (2.035)** | (-0.353) | (1.525) | (2.065)** | | | (3.119) |
| 19 | 0.767 | -0.031 | -0.001 | 0.148 | -0.014 | 0.072 | | -3.681 | | 3.26 |
| | (5.342)*** | (-0.294) | (-0.011) | (2.157)** | (-0.267) | (1.539) | | (3.113)*** | | (3.102) |
| 20 | 0.771 | -0.03 | -0.001 | 0.145 | -0.021 | 0.072 | | | -3.174 | 3.28 |
| | (5.387)*** | (-0.283) | (-0.008) | (2.063)** | (-0.392) | (1.51) | | | (2.669)*** | (3.122) |
| 21 | 0.781 | -0.04 | -0.005 | 0.14 | -0.011 | 0.074 | -0.83 | -3.35 | | 3.397 |
| | (5.425)*** | (-0.389) | (-0.066) | (2.047)** | (-0.221) | (1.603) | (1.959)* | (3.235)*** | | (3.212) |
| 22 | 0.777 | -0.039 | -0.003 | 0.145 | -0.016 | 0.075 | -0.928 | | -3.068 | 3.413 |
| | (5.412)*** | (-0.383) | (-0.043) | (2.118)** | (-0.309) | (1.59) | (2.121)** | | (2.671)*** | (3.229) |
| 23 | 0.773 | -0.035 | -0.001 | 0.139 | -0.014 | 0.07 | | -3.566 | -2.926 | 3.419 |
| | (5.372)*** | (-0.344) | (-0.015) | (2.052)** | (-0.281) | (1.518) | | (3.207)*** | (2.557)** | (3.235) |
| 24 | 0.785 | -0.049 | -0.005 | 0.14 | -0.01 | 0.076 | -0.837 | -3.245 | -2.706 | 3.537 |
| | (5.44)*** | (-0.491) | (-0.072) | (2.095)** | (-0.199) | (1.659)* | (1.994)** | (3.253)*** | (2.475)** | (3.327) |

| # | $\hat{\lambda}_{\text{intercept}}$ | $\hat{\lambda}_{\beta_{MktRF}}$ | $\hat{\lambda}_{\beta_{SMB}}$ | $\hat{\lambda}_{\beta_{HML}}$ | $\hat{\lambda}_{\beta_{RMW}}$ | $\hat{\lambda}_{\beta_{CMA}}$ | $\hat{\lambda}_{\beta_{INDew}}$ | $\hat{\lambda}_{\beta_{MKTew}}$ | $\hat{\lambda}_{\beta_{FIRMew}}$ | $R^2$, $\bar{R}^2$ (in %) |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.896 | -0.104 | | | | | | | | 1.595 |
| | (5.838)*** | (-0.825) | | | | | | | | (1.569) |
| 2 | 0.839 | -0.05 | | | | | -0.925 | | | 1.896 |
| | (5.482)*** | (-0.407) | | | | | (3.092)*** | | | (1.842) |
| 3 | 0.834 | -0.068 | | | | | | -2.438 | | 1.873 |
| | (5.445)*** | (-0.556) | | | | | | (2.804)*** | | (1.819) |
| 4 | 0.824 | -0.031 | | | | | | | -15.257 | 1.901 |
| | (5.424)*** | (-0.248) | | | | | | | (3.957)*** | (1.848) |
| 5 | 0.851 | -0.047 | | | | | -0.831 | -2.382 | | 2.224 |
| | (5.56)*** | (-0.401) | | | | | (3.127)*** | (3.056)*** | | (2.144) |
| 6 | 0.82 | -0.037 | | | | | -0.883 | | -14.955 | 2.185 |
| | (5.385)*** | (-0.31) | | | | | (3.011)*** | | (3.996)*** | (2.105) |
| 7 | 0.833 | -0.041 | | | | | | -2.392 | -14.212 | 2.214 |
| | (5.431)*** | (-0.35) | | | | | | (3.049)*** | (4.356)*** | (2.134) |
| 8 | 0.832 | -0.038 | | | | | -0.803 | -2.355 | -13.427 | 2.477 |
| | (5.447)*** | (-0.328) | | | | | (3.099)*** | (3.097)*** | (4.178)*** | (2.371) |
| 9 | 0.827 | -0.083 | -0.014 | 0.147 | | | | | | 2.753 |
| | (5.731)*** | (-0.797) | (-0.195) | (2.049)** | | | | | | (2.674) |
| 10 | 0.77 | -0.033 | 0.004 | 0.134 | | | -0.87 | | | 2.956 |
| | (5.422)*** | (-0.319) | (0.06) | (1.857)* | | | (3.136)*** | | | (2.85) |
| 11 | 0.785 | -0.043 | -0.004 | 0.146 | | | | -2.449 | | 2.927 |
| | (5.469)*** | (-0.414) | (-0.051) | (2.078)** | | | | (3.01)*** | | (2.821) |
| 12 | 0.761 | -0.026 | 0.002 | 0.138 | | | | | -15.096 | 2.959 |
| | (5.383)*** | (-0.24) | (0.021) | (1.905)* | | | | | (4.075)*** | (2.853) |
| 13 | 0.779 | -0.037 | 0.004 | 0.133 | | | -0.791 | -2.359 | | 3.133 |
| | (5.422)*** | (-0.363) | (0.051) | (1.868)* | | | (3.178)*** | (3.33)*** | | (3.001) |
| 14 | 0.764 | -0.031 | 0.006 | 0.133 | | | -0.81 | | -14.268 | 3.149 |
| | (5.367)*** | (-0.303) | (0.088) | (1.876)* | | | (3.036)*** | | (4.236)*** | (3.018) |
| 15 | 0.773 | -0.034 | 0.004 | 0.137 | | | | -2.284 | -13.481 | 3.148 |
| | (5.391)*** | (-0.333) | (0.048) | (1.961)* | | | | (3.146)*** | (4.316)*** | (3.016) |
| 16 | 0.772 | -0.034 | 0.007 | 0.131 | | | -0.735 | -2.237 | -12.905 | 3.321 |
| | (5.357)*** | (-0.337) | (0.095) | (1.876)* | | | (3.079)*** | (3.256)*** | (4.295)*** | (3.163) |
| 17 | 0.811 | -0.068 | -0.012 | 0.142 | -0.009 | 0.077 | | | | 3.098 |
| | (5.626)*** | (-0.663) | (-0.166) | (2.044)** | (-0.169) | (1.6) | | | | (2.966) |
| 18 | 0.761 | -0.024 | 0.004 | 0.135 | -0.014 | 0.068 | -0.874 | | | 3.273 |
| | (5.341)*** | (-0.228) | (0.061) | (1.938)* | (-0.278) | (1.414) | (3.245)*** | | | (3.115) |
| 19 | 0.772 | -0.031 | -0.001 | 0.144 | -0.012 | 0.071 | | -2.526 | | 3.253 |
| | (5.367)*** | (-0.303) | (-0.02) | (2.096)** | (-0.23) | (1.496) | | (3.088)*** | | (3.094) |
| 20 | 0.751 | -0.016 | 0.002 | 0.138 | -0.017 | 0.067 | | | -15.704 | 3.278 |
| | (5.303)*** | (-0.15) | (0.028) | (1.971)** | (-0.328) | (1.375) | | | (4.194)*** | (3.12) |
| 21 | 0.769 | -0.028 | 0.004 | 0.134 | -0.018 | 0.07 | -0.812 | -2.429 | | 3.428 |
| | (5.331)*** | (-0.276) | (0.056) | (1.936)* | (-0.345) | (1.455) | (3.24)*** | (3.42)*** | | (3.244) |
| 22 | 0.756 | -0.023 | 0.006 | 0.135 | -0.015 | 0.069 | -0.828 | | -14.604 | 3.444 |
| | (5.299)*** | (-0.223) | (0.086) | (1.964)* | (-0.293) | (1.465) | (3.157)*** | | (4.389)*** | (3.26) |
| 23 | 0.765 | -0.026 | 0.004 | 0.137 | -0.014 | 0.067 | | -2.411 | -13.948 | 3.43 |
| | (5.327)*** | (-0.251) | (0.056) | (2.01)** | (-0.271) | (1.415) | | (3.299)*** | (4.401)*** | (3.246) |
| 24 | 0.765 | -0.028 | 0.007 | 0.134 | -0.019 | 0.07 | -0.764 | -2.363 | -13.426 | 3.589 |
| | (5.294)*** | (-0.278) | (0.096) | (1.959)* | (-0.364) | (1.494) | (3.17)*** | (3.415)*** | (4.395)*** | (3.379) |

### 1.1.3 Newey-West t-statistics

| # | $\hat{\lambda}_{\text{intercept}}$ | $\hat{\lambda}_{\beta_{MktRF}}$ | $\hat{\lambda}_{\beta_{SMB}}$ | $\hat{\lambda}_{\beta_{HML}}$ | $\hat{\lambda}_{\beta_{RMW}}$ | $\hat{\lambda}_{\beta_{CMA}}$ | $\hat{\lambda}_{\beta_{INDvw}}$ | $\hat{\lambda}_{\beta_{MKTvw}}$ | $\hat{\lambda}_{\beta_{FIRMvw}}$ | $R^2$, $\bar{R}^2$ (in %) |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.896 | -0.104 | | | | | | | | 1.595 |
| | (4.48)*** | (-0.817) | | | | | | | | (1.569) |
| 2 | 0.853 | -0.073 | | | | | -0.966 | | | 1.896 |
| | (4.197)*** | (-0.558) | | | | | (1.733)* | | | (1.842) |
| 3 | 0.831 | -0.074 | | | | | | -3.62 | | 1.918 |
| | (4.168)*** | (-0.569) | | | | | | (1.977)** | | (1.865) |
| 4 | 0.845 | -0.073 | | | | | | | -3.365 | 1.911 |
| | (4.185)*** | (-0.553) | | | | | | | (2.206)** | (1.857) |
| 5 | 0.839 | -0.099 | | | | | -0.87 | -3.265 | | 2.225 |
| | (4.24)*** | (-0.79) | | | | | (1.714)* | (2.066)** | | (2.145) |
| 6 | 0.834 | -0.091 | | | | | -0.942 | | -3.083 | 2.168 |
| | (4.134)*** | (-0.715) | | | | | (1.739)* | | (2.127)** | (2.088) |
| 7 | 0.841 | -0.08 | | | | | | -3.627 | -3.14 | 2.251 |
| | (4.233)*** | (-0.628) | | | | | | (2.1)** | (2.204)** | (2.171) |
| 8 | 0.837 | -0.1 | | | | | -0.887 | -3.271 | -2.813 | 2.427 |
| | (4.225)*** | (-0.814) | | | | | (1.742)* | (2.046)** | (2.103)** | (2.321) |
| 9 | 0.827 | -0.083 | -0.014 | 0.147 | | | | | | 2.753 |
| | (4.3)*** | (-0.762) | (-0.194) | (2.34)** | | | | | | (2.674) |
| 10 | 0.789 | -0.042 | -0.007 | 0.142 | | | -0.876 | | | 2.965 |
| | (4.068)*** | (-0.372) | (-0.102) | (2.248)** | | | (1.66)* | | | (2.86) |
| 11 | 0.78 | -0.042 | -0.002 | 0.15 | | | | -3.619 | | 2.938 |
| | (4.008)*** | (-0.372) | (-0.029) | (2.382)** | | | | (1.987)** | | (2.832) |
| 12 | 0.782 | -0.041 | -0.002 | 0.145 | | | | | -3.121 | 2.969 |
| | (4.038)*** | (-0.366) | (-0.026) | (2.29)** | | | | | (2.102)** | (2.863) |
| 13 | 0.79 | -0.049 | -0.005 | 0.143 | | | -0.823 | -3.31 | | 3.11 |
| | (4.073)*** | (-0.452) | (-0.073) | (2.312)** | | | (1.678)* | (2.15)** | | (2.978) |
| 14 | 0.787 | -0.052 | -0.005 | 0.148 | | | -0.901 | | -2.978 | 3.133 |
| | (4.06)*** | (-0.472) | (-0.066) | (2.352)** | | | (1.721)* | | (2.117)** | (3.001) |
| 15 | 0.78 | -0.044 | -0.001 | 0.142 | | | | -3.581 | -2.946 | 3.127 |
| | (4.032)*** | (-0.4) | (-0.01) | (2.299)** | | | | (2.087)** | (2.108)** | (2.995) |
| 16 | 0.793 | -0.061 | -0.004 | 0.144 | | | -0.826 | -3.197 | -2.65 | 3.273 |
| | (4.109)*** | (-0.571) | (-0.057) | (2.356)** | | | (1.713)* | (2.123)** | (2.085)** | (3.115) |
| 17 | 0.811 | -0.068 | -0.012 | 0.142 | -0.009 | 0.077 | | | | 3.098 |
| | (4.206)*** | (-0.632) | (-0.166) | (2.318)** | (-0.188) | (1.802)* | | | | (2.966) |
| 18 | 0.778 | -0.034 | -0.003 | 0.142 | -0.019 | 0.073 | -0.909 | | | 3.277 |
| | (4.004)*** | (-0.3) | (-0.043) | (2.307)** | (-0.397) | (1.708)* | (1.669)* | | | (3.119) |
| 19 | 0.767 | -0.031 | -0.001 | 0.148 | -0.014 | 0.072 | | -3.681 | | 3.26 |
| | (3.94)*** | (-0.272) | (-0.011) | (2.415)** | (-0.293) | (1.709)* | | (1.985)** | | (3.102) |
| 20 | 0.771 | -0.03 | -0.001 | 0.145 | -0.021 | 0.072 | | | -3.174 | 3.28 |
| | (3.968)*** | (-0.259) | (-0.008) | (2.348)** | (-0.44) | (1.708)* | | | (2.079)** | (3.122) |
| 21 | 0.781 | -0.04 | -0.005 | 0.14 | -0.011 | 0.074 | -0.83 | -3.35 | | 3.397 |
| | (4.017)*** | (-0.366) | (-0.066) | (2.33)** | (-0.25) | (1.802)* | (-1.641) | (2.127)** | | (3.212) |
| 22 | 0.777 | -0.039 | -0.003 | 0.145 | -0.016 | 0.075 | -0.928 | | -3.068 | 3.413 |
| | (3.994)*** | (-0.354) | (-0.043) | (2.366)** | (-0.344) | (1.769)* | (1.718)* | | (2.136)** | (3.229) |
| 23 | 0.773 | -0.035 | -0.001 | 0.139 | -0.014 | 0.07 | | -3.566 | -2.926 | 3.419 |
| | (3.985)*** | (-0.318) | (-0.015) | (2.338)** | (-0.315) | (1.706)* | | (2.061)** | (2.052)** | (3.235) |
| 24 | 0.785 | -0.049 | -0.005 | 0.14 | -0.01 | 0.076 | -0.837 | -3.245 | -2.706 | 3.537 |
| | (4.049)*** | (-0.46) | (-0.071) | (2.371)** | (-0.225) | (1.863)* | (1.668)* | (2.084)** | (2.064)** | (3.327) |

| # | $\hat{\lambda}_{\text{intercept}}$ | $\hat{\lambda}_{\beta_{MktRF}}$ | $\hat{\lambda}_{\beta_{SMB}}$ | $\hat{\lambda}_{\beta_{HML}}$ | $\hat{\lambda}_{\beta_{RMW}}$ | $\hat{\lambda}_{\beta_{CMA}}$ | $\hat{\lambda}_{\beta_{INDew}}$ | $\hat{\lambda}_{\beta_{MKTew}}$ | $\hat{\lambda}_{\beta_{FIRMew}}$ | $R^2$, $\bar{R}^2$ (in %) |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.896 | -0.104 | | | | | | | | 1.595 |
| | (4.48)*** | (-0.817) | | | | | | | | (1.569) |
| 2 | 0.839 | -0.05 | | | | | -0.925 | | | 1.896 |
| | (4.172)*** | (-0.387) | | | | | (2.089)** | | | (1.842) |
| 3 | 0.834 | -0.068 | | | | | | -2.438 | | 1.873 |
| | (4.14)*** | (-0.527) | | | | | | (1.908)* | | (1.819) |
| 4 | 0.824 | -0.031 | | | | | | | -15.257 | 1.901 |
| | (4.111)*** | (-0.24) | | | | | | | (2.762)*** | (1.848) |
| 5 | 0.851 | -0.047 | | | | | -0.831 | -2.382 | | 2.224 |
| | (4.248)*** | (-0.382) | | | | | (2.121)** | (2.07)** | | (2.144) |
| 6 | 0.82 | -0.037 | | | | | -0.883 | | -14.955 | 2.185 |
| | (4.078)*** | (-0.292) | | | | | (2.032)** | | (2.651)*** | (2.105) |
| 7 | 0.833 | -0.041 | | | | | | -2.392 | -14.212 | 2.214 |
| | (4.133)*** | (-0.335) | | | | | | (2.078)** | (3.01)*** | (2.134) |
| 8 | 0.832 | -0.038 | | | | | -0.803 | -2.355 | -13.427 | 2.477 |
| | (4.149)*** | (-0.31) | | | | | (2.115)** | (2.099)** | (2.818)*** | (2.371) |
| 9 | 0.827 | -0.083 | -0.014 | 0.147 | | | | | | 2.753 |
| | (4.3)*** | (-0.762) | (-0.194) | (2.34)** | | | | | | (2.674) |
| 10 | 0.77 | -0.033 | 0.004 | 0.134 | | | -0.87 | | | 2.956 |
| | (4.021)*** | (-0.299) | (0.059) | (2.113)** | | | (2.109)** | | | (2.85) |
| 11 | 0.785 | -0.043 | -0.004 | 0.146 | | | | -2.449 | | 2.927 |
| | (4.05)*** | (-0.386) | (-0.051) | (2.341)** | | | | (1.969)** | | (2.821) |
| 12 | 0.761 | -0.026 | 0.002 | 0.138 | | | | | -15.096 | 2.959 |
| | (3.984)*** | (-0.223) | (0.021) | (2.173)** | | | | | (2.815)*** | (2.853) |
| 13 | 0.779 | -0.037 | 0.004 | 0.133 | | | -0.791 | -2.359 | | 3.133 |
| | (4.03)*** | (-0.344) | (0.05) | (2.139)** | | | (2.164)** | (2.191)** | | (3.001) |
| 14 | 0.764 | -0.031 | 0.006 | 0.133 | | | -0.81 | | -14.268 | 3.149 |
| | (3.991)*** | (-0.285) | (0.087) | (2.14)** | | | (2.064)** | | (2.862)*** | (3.018) |
| 15 | 0.773 | -0.034 | 0.004 | 0.137 | | | | -2.284 | -13.481 | 3.148 |
| | (3.989)*** | (-0.316) | (0.048) | (2.233)** | | | | (2.107)** | (3.039)*** | (3.016) |
| 16 | 0.772 | -0.034 | 0.007 | 0.131 | | | -0.735 | -2.237 | -12.905 | 3.321 |
| | (3.988)*** | (-0.32) | (0.095) | (2.148)** | | | (2.137)** | (2.189)** | (3)*** | (3.163) |
| 17 | 0.811 | -0.068 | -0.012 | 0.142 | -0.009 | 0.077 | | | | 3.098 |
| | (4.206)*** | (-0.632) | (-0.166) | (2.318)** | (-0.188) | (1.802)* | | | | (2.966) |
| 18 | 0.761 | -0.024 | 0.004 | 0.135 | -0.014 | 0.068 | -0.874 | | | 3.273 |
| | (3.959)*** | (-0.214) | (0.061) | (2.204)** | (-0.313) | (1.599) | (2.17)** | | | (3.115) |
| 19 | 0.772 | -0.031 | -0.001 | 0.144 | -0.012 | 0.071 | | -2.526 | | 3.253 |
| | (3.965)*** | (-0.281) | (-0.02) | (2.358)** | (-0.251) | (1.668)* | | (1.978)** | | (3.094) |
| 20 | 0.751 | -0.016 | 0.002 | 0.138 | -0.017 | 0.067 | | | -15.704 | 3.278 |
| | (3.921)*** | (-0.139) | (0.028) | (2.243)** | (-0.36) | (1.558) | | | (2.829)*** | (3.12) |
| 21 | 0.769 | -0.028 | 0.004 | 0.134 | -0.018 | 0.07 | -0.812 | -2.429 | | 3.428 |
| | (3.956)*** | (-0.259) | (0.055) | (2.221)** | (-0.392) | (1.647) | (2.181)** | (2.211)** | | (3.244) |
| 22 | 0.756 | -0.023 | 0.006 | 0.135 | -0.015 | 0.069 | -0.828 | | -14.604 | 3.444 |
| | (3.955)*** | (-0.209) | (0.085) | (2.244)** | (-0.333) | (1.646) | (2.119)** | | (2.931)*** | (3.26) |
| 23 | 0.765 | -0.026 | 0.004 | 0.137 | -0.014 | 0.067 | | -2.411 | -13.948 | 3.43 |
| | (3.946)*** | (-0.238) | (0.056) | (2.295)** | (-0.301) | (1.592) | | (2.177)** | (3.066)*** | (3.246) |
| 24 | 0.765 | -0.028 | 0.007 | 0.134 | -0.019 | 0.07 | -0.764 | -2.363 | -13.426 | 3.589 |
| | (3.951)*** | (-0.263) | (0.095) | (2.256)** | (-0.418) | (1.679)* | (2.165)** | (2.252)** | (3.028)*** | (3.379) |

### 1.1.4 Newey-West t-statistics, dataset is same as controls

| # | $\hat{\lambda}_{\text{intercept}}$ | $\hat{\lambda}_{\beta_{MktRF}}$ | $\hat{\lambda}_{\beta_{SMB}}$ | $\hat{\lambda}_{\beta_{HML}}$ | $\hat{\lambda}_{\beta_{RMW}}$ | $\hat{\lambda}_{\beta_{CMA}}$ | $\hat{\lambda}_{\beta_{INDvw}}$ | $\hat{\lambda}_{\beta_{MKTvw}}$ | $\hat{\lambda}_{\beta_{FIRMvw}}$ | $R^2$, $\bar{R}^2$ (in %) |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.865 | -0.049 | | | | | | | | 1.596 |
| | (4.545)*** | (-0.387) | | | | | | | | (1.557) |
| 2 | 0.828 | -0.025 | | | | | -0.861 | | | 1.922 |
| | (4.256)*** | (-0.194) | | | | | (1.725)* | | | (1.843) |
| 3 | 0.807 | -0.027 | | | | | | -3.159 | | 1.922 |
| | (4.243)*** | (-0.215) | | | | | | (2.215)** | | (1.843) |
| 4 | 0.815 | -0.017 | | | | | | | -3.228 | 1.951 |
| | (4.213)*** | (-0.13) | | | | | | | (2.373)** | (1.872) |
| 5 | 0.82 | -0.048 | | | | | -0.733 | -2.834 | | 2.254 |
| | (4.331)*** | (-0.398) | | | | | (1.719)* | (2.174)** | | (2.136) |
| 6 | 0.809 | -0.037 | | | | | -0.892 | | -3.115 | 2.247 |
| | (4.184)*** | (-0.288) | | | | | (1.783)* | | (2.315)** | (2.129) |
| 7 | 0.838 | -0.045 | | | | | | -2.557 | -2.387 | 2.274 |
| | (4.417)*** | (-0.369) | | | | | | (2.277)** | (2.291)** | (2.157) |
| 8 | 0.835 | -0.063 | | | | | -0.634 | -2.48 | -2.305 | 2.506 |
| | (4.416)*** | (-0.528) | | | | | (1.652)* | (2.212)** | (2.225)** | (2.349) |
| 9 | 0.801 | -0.045 | 0.021 | 0.153 | | | | | | 2.88 |
| | (4.346)*** | (-0.418) | (0.283) | (2.57)** | | | | | | (2.764) |
| 10 | 0.769 | -0.011 | 0.03 | 0.148 | | | -0.808 | | | 3.116 |
| | (4.114)*** | (-0.102) | (0.416) | (2.454)** | | | (1.774)* | | | (2.961) |
| 11 | 0.775 | -0.026 | 0.032 | 0.156 | | | | -2.941 | | 3.085 |
| | (4.162)*** | (-0.243) | (0.44) | (2.624)*** | | | | (2.106)** | | (2.93) |
| 12 | 0.761 | -0.01 | 0.038 | 0.149 | | | | | -3.068 | 3.127 |
| | (4.086)*** | (-0.094) | (0.512) | (2.461)** | | | | | (2.346)** | (2.972) |
| 13 | 0.779 | -0.026 | 0.031 | 0.153 | | | -0.736 | -2.864 | | 3.274 |
| | (4.181)*** | (-0.245) | (0.423) | (2.547)** | | | (1.704)* | (2.062)** | | (3.081) |
| 14 | 0.768 | -0.023 | 0.035 | 0.153 | | | -0.856 | | -2.969 | 3.322 |
| | (4.114)*** | (-0.211) | (0.472) | (2.512)** | | | (1.867)* | | (2.358)** | (3.129) |
| 15 | 0.79 | -0.038 | 0.033 | 0.145 | | | | -2.596 | -2.409 | 3.293 |
| | (4.266)*** | (-0.358) | (0.455) | (2.465)** | | | | (2.033)** | (2.186)** | (3.1) |
| 16 | 0.791 | -0.046 | 0.032 | 0.151 | | | -0.696 | -2.648 | -2.42 | 3.472 |
| | (4.269)*** | (-0.443) | (0.438) | (2.545)** | | | (1.688)* | (2.036)** | (2.169)** | (3.241) |
| 17 | 0.792 | -0.039 | 0.022 | 0.151 | -0.009 | 0.067 | | | | 3.29 |
| | (4.279)*** | (-0.365) | (0.309) | (2.587)** | (-0.2) | (1.578) | | | | (3.097) |
| 18 | 0.765 | -0.011 | 0.033 | 0.148 | -0.015 | 0.061 | -0.859 | | | 3.486 |
| | (4.071)*** | (-0.099) | (0.47) | (2.51)** | (-0.331) | (1.417) | (1.837)* | | | (3.254) |
| 19 | 0.768 | -0.02 | 0.032 | 0.154 | -0.01 | 0.066 | | -3.067 | | 3.463 |
| | (4.097)*** | (-0.19) | (0.447) | (2.653)*** | (-0.237) | (1.554) | | (2.068)** | | (3.231) |
| 20 | 0.76 | -0.01 | 0.036 | 0.15 | -0.017 | 0.063 | | | -3.07 | 3.496 |
| | (4.059)*** | (-0.091) | (0.502) | (2.532)** | (-0.373) | (1.471) | | | (2.333)** | (3.265) |
| 21 | 0.773 | -0.022 | 0.032 | 0.149 | -0.011 | 0.067 | -0.791 | -2.974 | | 3.622 |
| | (4.121)*** | (-0.203) | (0.454) | (2.561)** | (-0.254) | (1.598) | (1.743)* | (2.064)** | | (3.352) |
| 22 | 0.766 | -0.019 | 0.035 | 0.151 | -0.015 | 0.062 | -0.885 | | -3.009 | 3.662 |
| | (4.073)*** | (-0.174) | (0.489) | (2.549)** | (-0.343) | (1.442) | (1.86)* | | (2.341)** | (3.392) |
| 23 | 0.782 | -0.031 | 0.032 | 0.146 | -0.011 | 0.067 | | -2.746 | -2.503 | 3.647 |
| | (4.198)*** | (-0.288) | (0.451) | (2.526)** | (-0.259) | (1.612) | | (1.987)** | (2.14)** | (3.377) |
| 24 | 0.787 | -0.039 | 0.03 | 0.148 | -0.01 | 0.069 | -0.745 | -2.713 | -2.506 | 3.798 |
| | (4.209)*** | (-0.37) | (0.424) | (2.559)** | (-0.244) | (1.644) | (1.652)* | (1.953)* | (2.111)** | (3.49) |

| # | $\hat{\lambda}_{\text{intercept}}$ | $\hat{\lambda}_{\beta_{MktRF}}$ | $\hat{\lambda}_{\beta_{SMB}}$ | $\hat{\lambda}_{\beta_{HML}}$ | $\hat{\lambda}_{\beta_{RMW}}$ | $\hat{\lambda}_{\beta_{CMA}}$ | $\hat{\lambda}_{\beta_{INDew}}$ | $\hat{\lambda}_{\beta_{MKTew}}$ | $\hat{\lambda}_{\beta_{FIRMew}}$ | $R^2$, $\bar{R}^2$ (in %) |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.865 | -0.049 | | | | | | | | 1.596 |
| | (4.545)*** | (-0.387) | | | | | | | | (1.557) |
| 2 | 0.824 | -0.012 | | | | | -0.755 | | | 1.933 |
| | (4.285)*** | (-0.097) | | | | | (2.135)** | | | (1.854) |
| 3 | 0.821 | -0.032 | | | | | | -1.996 | | 1.881 |
| | (4.266)*** | (-0.26) | | | | | | (2.034)** | | (1.802) |
| 4 | 0.804 | 0.017 | | | | | | | -13.487 | 1.937 |
| | (4.196)*** | (0.13) | | | | | | | (2.657)*** | (1.858) |
| 5 | 0.818 | -0.002 | | | | | -0.657 | -2.013 | | 2.258 |
| | (4.287)*** | (-0.018) | | | | | (2.223)** | (2.316)** | | (2.141) |
| 6 | 0.802 | 0.004 | | | | | -0.717 | | -12.464 | 2.274 |
| | (4.162)*** | (0.033) | | | | | (2.01)** | | (2.621)*** | (2.156) |
| 7 | 0.824 | -0.003 | | | | | | -1.86 | -10.721 | 2.238 |
| | (4.286)*** | (-0.026) | | | | | | (2.165)** | (2.883)*** | (2.12) |
| 8 | 0.805 | 0.006 | | | | | -0.602 | -1.844 | -10.538 | 2.563 |
| | (4.217)*** | (0.049) | | | | | (2.054)** | (2.165)** | (2.742)*** | (2.406) |
| 9 | 0.801 | -0.045 | 0.021 | 0.153 | | | | | | 2.88 |
| | (4.346)*** | (-0.418) | (0.283) | (2.57)** | | | | | | (2.764) |
| 10 | 0.762 | -0.013 | 0.037 | 0.145 | | | -0.751 | | | 3.097 |
| | (4.142)*** | (-0.118) | (0.497) | (2.401)** | | | (2.153)** | | | (2.942) |
| 11 | 0.784 | -0.033 | 0.031 | 0.151 | | | | -1.885 | | 3.073 |
| | (4.237)*** | (-0.313) | (0.421) | (2.561)** | | | | (2.123)** | | (2.918) |
| 12 | 0.741 | 0.008 | 0.039 | 0.148 | | | | | -13.362 | 3.105 |
| | (4.049)*** | (0.067) | (0.525) | (2.462)** | | | | | (2.796)*** | (2.95) |
| 13 | 0.772 | -0.021 | 0.038 | 0.141 | | | -0.621 | -1.829 | | 3.3 |
| | (4.178)*** | (-0.203) | (0.516) | (2.387)** | | | (2.269)** | (2.296)** | | (3.106) |
| 14 | 0.746 | 0.002 | 0.039 | 0.145 | | | -0.693 | | -12.431 | 3.321 |
| | (4.046)*** | (0.019) | (0.526) | (2.442)** | | | (2.05)** | | (2.835)*** | (3.128) |
| 15 | 0.766 | -0.015 | 0.04 | 0.145 | | | | -1.683 | -10.398 | 3.303 |
| | (4.13)*** | (-0.146) | (0.538) | (2.485)** | | | | (2.138)** | (3.099)*** | (3.109) |
| 16 | 0.76 | -0.01 | 0.039 | 0.14 | | | -0.553 | -1.658 | -10.304 | 3.512 |
| | (4.097)*** | (-0.095) | (0.539) | (2.393)** | | | (2.087)** | (2.165)** | (3.026)*** | (3.28) |
| 17 | 0.792 | -0.039 | 0.022 | 0.151 | -0.009 | 0.067 | | | | 3.29 |
| | (4.279)*** | (-0.365) | (0.309) | (2.587)** | (-0.2) | (1.578) | | | | (3.097) |
| 18 | 0.765 | -0.013 | 0.032 | 0.144 | -0.01 | 0.059 | -0.757 | | | 3.48 |
| | (4.12)*** | (-0.122) | (0.451) | (2.451)** | (-0.238) | (1.377) | (2.218)** | | | (3.249) |
| 19 | 0.778 | -0.027 | 0.03 | 0.148 | -0.009 | 0.063 | | -1.975 | | 3.458 |
| | (4.167)*** | (-0.263) | (0.432) | (2.573)** | (-0.219) | (1.491) | | (2.148)** | | (3.226) |
| 20 | 0.739 | 0.007 | 0.039 | 0.147 | -0.017 | 0.06 | | | -13.713 | 3.483 |
| | (4.014)*** | (0.06) | (0.552) | (2.517)** | (-0.379) | (1.388) | | | (2.849)*** | (3.251) |
| 21 | 0.771 | -0.018 | 0.034 | 0.138 | -0.012 | 0.06 | -0.635 | -1.891 | | 3.652 |
| | (4.127)*** | (-0.175) | (0.479) | (2.402)** | (-0.277) | (1.408) | (2.294)** | (2.331)** | | (3.382) |
| 22 | 0.747 | 0.001 | 0.035 | 0.146 | -0.015 | 0.062 | -0.709 | | -12.621 | 3.671 |
| | (4.03)*** | (0.005) | (0.497) | (2.556)** | (-0.348) | (1.47) | (2.073)** | | (2.859)*** | (3.401) |
| 23 | 0.759 | -0.012 | 0.042 | 0.142 | -0.013 | 0.059 | | -1.809 | -10.871 | 3.642 |
| | (4.083)*** | (-0.12) | (0.591) | (2.512)** | (-0.311) | (1.387) | | (2.259)** | (3.195)*** | (3.372) |
| 24 | 0.758 | -0.011 | 0.038 | 0.14 | -0.015 | 0.061 | -0.569 | -1.744 | -10.533 | 3.829 |
| | (4.066)*** | (-0.109) | (0.535) | (2.482)** | (-0.349) | (1.45) | (2.102)** | (2.241)** | (3.056)*** | (3.522) |

### 1.1.5 Newey-West t-statistics, controls

| ept | $\hat{\lambda}_{\beta_{MktRF}}$ | $\hat{\lambda}_{\beta_{SMB}}$ | $\hat{\lambda}_{\beta_{HML}}$ | $\hat{\lambda}_{\beta_{RMW}}$ | $\hat{\lambda}_{\beta_{CMA}}$ | $\hat{\lambda}_{\beta_{INDvw}}$ | $\hat{\lambda}_{\beta_{MKTvw}}$ | $\hat{\lambda}_{\beta_{FIRMvw}}$ | $\hat{\lambda}_{\text{ln.BM}}$ | $\hat{\lambda}_{\text{ln.ME}}$ | $R^2$, $\bar{R}^2$ (in %) | # | $\hat{\lambda}_{\text{intercep}}$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | -0.049 | | | | | | | | | | 1.596 | 1 | 0.865 |
| *** | (-0.387) | | | | | | | | | | (1.557) | | (4.545)** |
| | -0.019 | | | | | -0.816 | | | | -0.105 | 3.086 | 2 | 1.305 |
| *** | (-0.15) | | | | | (-1.64) | | | | (2.671)*** | (2.969) | | (3.996)** |
| | 0.037 | | | | | -0.904 | | | 0.354 | | 2.431 | 3 | 0.856 |
| *** | (0.297) | | | | | (1.777)* | | | (5.437)*** | | (2.314) | | (4.371)** |
| | 0.04 | | | | | -0.88 | | | 0.274 | -0.071 | 3.525 | 4 | 1.182 |
| *** | (0.337) | | | | | (1.745)* | | | (3.896)*** | (1.691)* | (3.37) | | (3.606)** |
| | 0.031 | | | | | | -2.877 | | 0.266 | -0.069 | 3.47 | 5 | 1.157 |
| ** | (0.269) | | | | | | (2.053)** | | (3.818)*** | (1.669)* | (3.315) | | (3.568)** |
| | 0.046 | | | | | | | -2.869 | 0.274 | -0.069 | 3.547 | 6 | 1.18 |
| *** | (0.384) | | | | | | | (2.107)** | (3.898)*** | (1.661)* | (3.392) | | (3.608)** |
| | 0.029 | | | | | -0.743 | -2.628 | | 0.275 | -0.071 | 3.699 | 7 | 1.208 |
| ** | (0.26) | | | | | (1.715)* | (2.039)** | | (3.925)*** | (1.745)* | (3.506) | | (3.777)** |
| | 0.033 | | | | | -0.868 | | -2.815 | 0.272 | -0.064 | 3.753 | 8 | 1.165 |
| *** | (0.275) | | | | | (1.717)* | | (2.081)** | (3.855)*** | (-1.53) | (3.561) | | (3.566)** |
| | 0.021 | | | | | | -2.336 | -2.114 | 0.273 | -0.073 | 3.726 | 9 | 1.223 |
| *** | (0.192) | | | | | | (2.113)** | (2.014)** | (3.871)*** | (1.785)* | (3.533) | | (3.795)** |
| | 0.01 | | | | | -0.618 | -2.237 | -2.058 | 0.273 | -0.068 | 3.912 | 10 | 1.206 |
| *** | (0.086) | | | | | (-1.58) | (2.043)** | (1.968)** | (3.865)*** | (1.673)* | (3.681) | | (3.769)** |
| | -0.045 | 0.021 | 0.153 | | | | | | | | 2.88 | 11 | 0.801 |
| *** | (-0.418) | (0.283) | (2.57)** | | | | | | | | (2.764) | | (4.346)** |
| | 0.035 | -0.047 | 0.133 | | | -0.759 | | | | -0.114 | 3.831 | 12 | 1.29 |
| ** | (0.314) | (-0.768) | (2.203)** | | | (-1.646) | | | | (3.26)*** | (3.639) | | (4.315)** |
| | 0.034 | 0.025 | 0.073 | | | -0.823 | | | 0.309 | | 3.483 | 13 | 0.817 |
| *** | (0.323) | (0.348) | (1.316) | | | (1.769)* | | | (5.093)*** | | (3.29) | | (4.3)*** |
| | 0.064 | -0.021 | 0.072 | | | -0.799 | | | 0.239 | -0.081 | 4.16 | 14 | 1.173 |
| *** | (0.595) | (-0.362) | (1.331) | | | (1.709)* | | | (3.734)*** | (2.233)** | (3.93) | | (3.923)** |
| | 0.051 | -0.02 | 0.079 | | | | -2.773 | | 0.234 | -0.081 | 4.124 | 15 | 1.204 |
| *** | (0.484) | (-0.341) | (1.485) | | | | (2.001)** | | (3.687)*** | (2.219)** | (3.894) | | (4.028)** |
| | 0.067 | -0.016 | 0.073 | | | | | -2.756 | 0.24 | -0.081 | 4.172 | 16 | 1.164 |
| *** | (0.617) | (-0.28) | (1.337) | | | | | (2.078)** | (3.752)*** | (2.21)** | (3.942) | | (3.893)** |
| | 0.054 | -0.023 | 0.072 | | | -0.73 | -2.718 | | 0.245 | -0.082 | 4.303 | 17 | 1.194 |
| *** | (0.508) | (-0.389) | (1.344) | | | (-1.643) | (1.958)* | | (3.835)*** | (2.259)** | (4.035) | | (3.993)** |
| | 0.053 | -0.018 | 0.074 | | | -0.818 | | -2.686 | 0.239 | -0.079 | 4.348 | 18 | 1.17 |
| *** | (0.499) | (-0.308) | (1.37) | | | (1.757)* | | (2.116)** | (3.736)*** | (2.188)** | (4.08) | | (3.909)** |
| | 0.042 | -0.022 | 0.068 | | | | -2.475 | -2.138 | 0.247 | -0.08 | 4.322 | 19 | 1.21 |
| *** | (0.398) | (-0.38) | (1.288) | | | | (1.937)* | (1.903)* | (3.838)*** | (2.226)** | (4.054) | | (4.043)** |
| | 0.032 | -0.022 | 0.07 | | | -0.668 | -2.479 | -2.168 | 0.246 | -0.079 | 4.486 | 20 | 1.202 |
| *** | (0.31) | (-0.382) | (1.33) | | | (-1.583) | (1.924)* | (1.922)* | (3.842)*** | (2.187)** | (4.181) | | (4.004)** |
| | -0.039 | 0.022 | 0.151 | -0.009 | 0.067 | | | | | | 3.29 | 21 | 0.792 |
| *** | (-0.365) | (0.309) | (2.587)** | (-0.2) | (1.578) | | | | | | (3.097) | | (4.279)** |
| | 0.038 | -0.046 | 0.128 | 0.009 | 0.05 | -0.791 | | | | -0.114 | 4.175 | 22 | 1.306 |
| *** | (0.346) | (-0.78) | (2.171)** | (0.221) | (1.151) | (1.679)* | | | | (3.32)*** | (3.906) | | (4.341)** |
| | 0.035 | 0.027 | 0.072 | 0 | 0.022 | -0.86 | | | 0.311 | | 3.842 | 23 | 0.825 |
| *** | (0.331) | (0.384) | (1.329) | (0) | (0.544) | (1.8)* | | | (5.168)*** | | (3.573) | | (4.313)** |
| | 0.067 | -0.019 | 0.066 | 0.014 | 0.019 | -0.826 | | | 0.242 | -0.082 | 4.497 | 24 | 1.192 |
| ** | (0.631) | (-0.346) | (1.26) | (0.335) | (0.477) | (1.729)* | | | (3.772)*** | (2.269)** | (4.192) | | (3.951)** |
| | 0.059 | -0.021 | 0.072 | 0.017 | 0.023 | | -2.876 | | 0.237 | -0.082 | 4.468 | 25 | 1.208 |
| *** | (0.557) | (-0.367) | (1.398) | (0.438) | (0.57) | | (1.956)* | | (3.736)*** | (2.261)** | (4.162) | | (4.009)** |
| | 0.07 | -0.018 | 0.068 | 0.013 | 0.02 | | | -2.767 | 0.243 | -0.082 | 4.507 | 26 | 1.176 |
| *** | (0.648) | (-0.324) | (1.278) | (0.33) | (0.498) | | | (2.079)** | (3.786)*** | (2.255)** | (4.202) | | (3.912)** |
| | 0.059 | -0.022 | 0.065 | 0.017 | 0.023 | -0.767 | -2.809 | | 0.247 | -0.084 | 4.626 | 27 | 1.203 |
| *** | (0.56) | (-0.403) | (1.252) | (0.435) | (0.581) | (1.649)* | (1.957)* | | (3.862)*** | (2.324)** | (4.283) | | (3.976)** |
| | 0.058 | -0.016 | 0.068 | 0.015 | 0.018 | -0.844 | | -2.726 | 0.243 | -0.08 | 4.663 | 28 | 1.184 |
| ** | (0.549) | (-0.291) | (1.29) | (0.369) | (0.45) | (1.75)* | | (2.106)** | (3.786)*** | (2.232)** | (4.32) | | (3.935)** |
| | 0.049 | -0.023 | 0.063 | 0.018 | 0.024 | | -2.608 | -2.249 | 0.247 | -0.082 | 4.647 | 29 | 1.21 |
| *** | (0.47) | (-0.408) | (1.229) | (0.469) | (0.618) | | (1.891)* | (1.894)* | (3.85)*** | (2.287)** | (4.304) | | (4.025)** |
| | 0.039 | -0.022 | 0.063 | 0.018 | 0.023 | -0.716 | -2.539 | -2.26 | 0.248 | -0.081 | 4.792 | 30 | 1.205 |
| *** | (0.378) | (-0.403) | (1.236) | (0.473) | (0.577) | (-1.559) | (1.845)* | (1.887)* | (3.865)*** | (2.268)** | (4.411) | | (3.991)** |

## 1.2 SIC-10 divisions

### 1.2.1 Fama-MacBeth t-statistics

| # | $\hat{\lambda}_{\text{intercept}}$ | $\hat{\lambda}_{\beta_{MktRF}}$ | $\hat{\lambda}_{\beta_{SMB}}$ | $\hat{\lambda}_{\beta_{HML}}$ | $\hat{\lambda}_{\beta_{RMW}}$ | $\hat{\lambda}_{\beta_{CMA}}$ | $\hat{\lambda}_{\beta_{INDvw}}$ | $\hat{\lambda}_{\beta_{MKTvw}}$ | $\hat{\lambda}_{\beta_{FIRMvw}}$ | $R^2$, $\bar{R}^2$ (in %) |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.905 | -0.111 | | | | | | | | 1.604 |
| | (5.901)*** | (-0.908) | | | | | | | | (1.577) |
| 2 | 0.866 | -0.078 | | | | | -0.441 | | | 1.914 |
| | (5.669)*** | (-0.643) | | | | | (2.073)** | | | (1.86) |
| 3 | 0.841 | -0.082 | | | | | | -3.575 | | 1.929 |
| | (5.579)*** | (-0.68) | | | | | | (2.983)*** | | (1.875) |
| 4 | 0.856 | -0.081 | | | | | | | -3.84 | 1.914 |
| | (5.631)*** | (-0.662) | | | | | | | (2.56)** | (1.861) |
| 5 | 0.843 | -0.091 | | | | | -0.402 | -3.351 | | 2.27 |
| | (5.648)*** | (-0.78) | | | | | (1.992)** | (3.03)*** | | (2.19) |
| 6 | 0.851 | -0.084 | | | | | -0.399 | | -3.518 | 2.176 |
| | (5.605)*** | (-0.712) | | | | | (1.975)** | | (2.44)** | (2.096) |
| 7 | 0.852 | -0.093 | | | | | | -3.481 | -3.556 | 2.262 |
| | (5.705)*** | (-0.795) | | | | | | (3.063)*** | (2.469)** | (2.181) |
| 8 | 0.843 | -0.091 | | | | | -0.375 | -3.235 | -3.229 | 2.48 |
| | (5.648)*** | (-0.801) | | | | | (1.954)* | (3.083)*** | (2.356)** | (2.373) |
| 9 | 0.837 | -0.09 | -0.017 | 0.146 | | | | | | 2.765 |
| | (5.801)*** | (-0.883) | (-0.239) | (2.094)** | | | | | | (2.685) |
| 10 | 0.798 | -0.049 | -0.007 | 0.136 | | | -0.398 | | | 2.98 |
| | (5.567)*** | (-0.478) | (-0.099) | (1.946)* | | | (2.089)** | | | (2.873) |
| 11 | 0.79 | -0.049 | -0.005 | 0.149 | | | | -3.527 | | 2.951 |
| | (5.503)*** | (-0.481) | (-0.069) | (2.16)** | | | | (3.019)*** | | (2.844) |
| 12 | 0.794 | -0.049 | -0.006 | 0.144 | | | | | -3.491 | 2.979 |
| | (5.546)*** | (-0.473) | (-0.08) | (2.027)** | | | | | (2.466)** | (2.873) |
| 13 | 0.792 | -0.05 | -0.006 | 0.14 | | | -0.371 | -3.245 | | 3.12 |
| | (5.513)*** | (-0.5) | (-0.084) | (2.05)** | | | (2.034)** | (3.217)*** | | (2.987) |
| 14 | 0.795 | -0.051 | -0.002 | 0.141 | | | -0.348 | | -3.129 | 3.145 |
| | (5.54)*** | (-0.505) | (-0.032) | (2.005)** | | | (1.993)** | | (2.409)** | (3.013) |
| 15 | 0.793 | -0.053 | -0.005 | 0.141 | | | | -3.422 | -3.295 | 3.139 |
| | (5.527)*** | (-0.525) | (-0.068) | (2.058)** | | | | (3.104)*** | (2.406)** | (3.006) |
| 16 | 0.796 | -0.056 | -0.004 | 0.138 | | | -0.329 | -3.005 | -2.892 | 3.28 |
| | (5.543)*** | (-0.564) | (-0.062) | (2.026)** | | | (1.963)* | (3.269)*** | (2.326)** | (3.121) |
| 17 | 0.819 | -0.075 | -0.014 | 0.141 | -0.006 | 0.075 | | | | 3.112 |
| | (5.691)*** | (-0.736) | (-0.204) | (2.079)** | (-0.133) | (1.665)* | | | | (2.98) |
| 18 | 0.789 | -0.042 | -0.005 | 0.136 | -0.014 | 0.068 | -0.411 | | | 3.298 |
| | (5.505)*** | (-0.41) | (-0.074) | (1.991)** | (-0.296) | (1.514) | (2.123)** | | | (3.14) |
| 19 | 0.777 | -0.037 | -0.003 | 0.147 | -0.012 | 0.07 | | -3.589 | | 3.276 |
| | (5.41)*** | (-0.363) | (-0.049) | (2.189)** | (-0.245) | (1.593) | | (3.047)*** | | (3.117) |
| 20 | 0.781 | -0.037 | -0.003 | 0.143 | -0.018 | 0.07 | | | -3.553 | 3.294 |
| | (5.463)*** | (-0.36) | (-0.048) | (2.083)** | (-0.363) | (1.557) | | | (2.494)** | (3.135) |
| 21 | 0.786 | -0.045 | -0.004 | 0.137 | -0.008 | 0.068 | -0.382 | -3.298 | | 3.417 |
| | (5.46)*** | (-0.446) | (-0.063) | (2.071)** | (-0.179) | (1.551) | (2.064)** | (3.234)*** | | (3.232) |
| 22 | 0.784 | -0.04 | -0.001 | 0.139 | -0.013 | 0.068 | -0.368 | | -3.226 | 3.432 |
| | (5.464)*** | (-0.398) | (-0.011) | (2.031)** | (-0.255) | (1.499) | (2.061)** | | (2.464)** | (3.247) |
| 23 | 0.785 | -0.044 | -0.004 | 0.138 | -0.011 | 0.069 | | -3.408 | -3.26 | 3.434 |
| | (5.459)*** | (-0.435) | (-0.062) | (2.07)** | (-0.239) | (1.591) | | (3.114)*** | (2.381)** | (3.249) |
| 24 | 0.789 | -0.049 | -0.003 | 0.135 | -0.007 | 0.067 | -0.343 | -3.055 | -2.924 | 3.554 |
| | (5.474)*** | (-0.494) | (-0.04) | (2.04)** | (-0.144) | (1.539) | (2.001)** | (3.256)*** | (2.33)** | (3.342) |

| # | $\hat{\lambda}_{\text{intercept}}$ | $\hat{\lambda}_{\beta_{MktRF}}$ | $\hat{\lambda}_{\beta_{SMB}}$ | $\hat{\lambda}_{\beta_{HML}}$ | $\hat{\lambda}_{\beta_{RMW}}$ | $\hat{\lambda}_{\beta_{CMA}}$ | $\hat{\lambda}_{\beta_{INDew}}$ | $\hat{\lambda}_{\beta_{MKTew}}$ | $\hat{\lambda}_{\beta_{FIRMew}}$ | $R^2$, $\bar{R}^2$ (in %) |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.905 | -0.111 | | | | | | | | 1.604 |
| | (5.901)*** | (-0.908) | | | | | | | | (1.577) |
| 2 | 0.883 | -0.088 | | | | | -3.668 | | | 1.871 |
| | (5.761)*** | (-0.73) | | | | | (2.736)*** | | | (1.817) |
| 3 | 0.844 | -0.076 | | | | | | -2.385 | | 1.881 |
| | (5.509)*** | (-0.63) | | | | | | (2.748)*** | | (1.827) |
| 4 | 0.839 | -0.057 | | | | | | | -16.537 | 1.883 |
| | (5.556)*** | (-0.46) | | | | | | | (3.948)*** | (1.829) |
| 5 | 0.846 | -0.073 | | | | | -3.663 | -2.332 | | 2.11 |
| | (5.525)*** | (-0.624) | | | | | (3.027)*** | (2.792)*** | | (2.03) |
| 6 | 0.834 | -0.045 | | | | | -3.725 | | -16.838 | 2.134 |
| | (5.501)*** | (-0.371) | | | | | (2.853)*** | | (3.969)*** | (2.053) |
| 7 | 0.835 | -0.052 | | | | | | -2.356 | -16.057 | 2.147 |
| | (5.467)*** | (-0.438) | | | | | | (2.768)*** | (4.172)*** | (2.066) |
| 8 | 0.833 | -0.045 | | | | | -3.649 | -2.361 | -15.875 | 2.35 |
| | (5.434)*** | (-0.389) | | | | | (2.982)*** | (2.792)*** | (4.052)*** | (2.243) |
| 9 | 0.837 | -0.09 | -0.017 | 0.146 | | | | | | 2.765 |
| | (5.801)*** | (-0.883) | (-0.239) | (2.094)** | | | | | | (2.685) |
| 10 | 0.821 | -0.078 | -0.014 | 0.142 | | | -3.567 | | | 2.915 |
| | (5.721)*** | (-0.75) | (-0.193) | (2.026)** | | | (2.663)*** | | | (2.809) |
| 11 | 0.795 | -0.05 | -0.006 | 0.145 | | | | -2.368 | | 2.939 |
| | (5.542)*** | (-0.494) | (-0.09) | (2.117)** | | | | (2.915)*** | | (2.833) |
| 12 | 0.78 | -0.042 | -0.009 | 0.138 | | | | | -17.182 | 2.983 |
| | (5.511)*** | (-0.397) | (-0.132) | (1.961)* | | | | | (4.078)*** | (2.877) |
| 13 | 0.797 | -0.056 | -0.007 | 0.143 | | | -3.392 | -2.324 | | 3.078 |
| | (5.564)*** | (-0.552) | (-0.098) | (2.088)** | | | (2.899)*** | (2.985)*** | | (2.945) |
| 14 | 0.776 | -0.042 | -0.007 | 0.134 | | | -3.508 | | -16.866 | 3.104 |
| | (5.478)*** | (-0.396) | (-0.095) | (1.907)* | | | (2.702)*** | | (3.982)*** | (2.971) |
| 15 | 0.778 | -0.039 | -0.006 | 0.139 | | | | -2.28 | -16.168 | 3.161 |
| | (5.442)*** | (-0.382) | (-0.077) | (2.021)** | | | | (2.914)*** | (4.327)*** | (3.028) |
| 16 | 0.775 | -0.039 | -0.004 | 0.135 | | | -3.415 | -2.312 | -15.954 | 3.271 |
| | (5.413)*** | (-0.381) | (-0.06) | (1.955)* | | | (2.873)*** | (2.859)*** | (4.14)*** | (3.112) |
| 17 | 0.819 | -0.075 | -0.014 | 0.141 | -0.006 | 0.075 | | | | 3.112 |
| | (5.691)*** | (-0.736) | (-0.204) | (2.079)** | (-0.133) | (1.665)* | | | | (2.98) |
| 18 | 0.807 | -0.064 | -0.014 | 0.14 | -0.01 | 0.074 | -3.712 | | | 3.261 |
| | (5.626)*** | (-0.618) | (-0.203) | (2.066)** | (-0.213) | (1.649)* | (2.659)*** | | | (3.102) |
| 19 | 0.781 | -0.037 | -0.004 | 0.143 | -0.01 | 0.069 | | -2.445 | | 3.268 |
| | (5.433)*** | (-0.367) | (-0.058) | (2.128)** | (-0.206) | (1.547) | | (2.991)*** | | (3.109) |
| 20 | 0.767 | -0.03 | -0.008 | 0.137 | -0.009 | 0.065 | | | -18.051 | 3.301 |
| | (5.416)*** | (-0.288) | (-0.113) | (2)** | (-0.183) | (1.421) | | | (4.184)*** | (3.142) |
| 21 | 0.785 | -0.044 | -0.007 | 0.142 | -0.01 | 0.07 | -3.393 | -2.418 | | 3.401 |
| | (5.468)*** | (-0.436) | (-0.107) | (2.123)** | (-0.201) | (1.587) | (2.813)*** | (3.069)*** | | (3.215) |
| 22 | 0.768 | -0.032 | -0.01 | 0.133 | -0.008 | 0.066 | -3.565 | | -17.439 | 3.425 |
| | (5.417)*** | (-0.309) | (-0.138) | (1.944)* | (-0.168) | (1.45) | (2.693)*** | | (4.071)*** | (3.24) |
| 23 | 0.767 | -0.029 | -0.004 | 0.138 | -0.007 | 0.066 | | -2.397 | -16.84 | 3.453 |
| | (5.359)*** | (-0.28) | (-0.064) | (2.054)** | (-0.151) | (1.455) | | (3.031)*** | (4.446)*** | (3.268) |
| 24 | 0.768 | -0.03 | -0.007 | 0.136 | -0.008 | 0.065 | -3.482 | -2.448 | -16.786 | 3.565 |
| | (5.355)*** | (-0.291) | (-0.107) | (2.012)** | (-0.159) | (1.454) | (2.728)*** | (2.864)*** | (4.158)*** | (3.354) |

### 1.2.2 Newey-West t-statistics

| # | $\hat{\lambda}_{\text{intercept}}$ | $\hat{\lambda}_{\beta_{MktRF}}$ | $\hat{\lambda}_{\beta_{SMB}}$ | $\hat{\lambda}_{\beta_{HML}}$ | $\hat{\lambda}_{\beta_{RMW}}$ | $\hat{\lambda}_{\beta_{CMA}}$ | $\hat{\lambda}_{\beta_{INDvw}}$ | $\hat{\lambda}_{\beta_{MKTvw}}$ | $\hat{\lambda}_{\beta_{FIRMvw}}$ | $R^2$, $\bar{R}^2$ (in %) |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.905 | -0.111 | | | | | | | | 1.604 |
| | (4.528)*** | (-0.874) | | | | | | | | (1.577) |
| 2 | 0.866 | -0.078 | | | | | -0.441 | | | 1.914 |
| | (4.274)*** | (-0.596) | | | | | (-1.575) | | | (1.86) |
| 3 | 0.841 | -0.082 | | | | | | -3.575 | | 1.929 |
| | (4.215)*** | (-0.627) | | | | | | (1.953)* | | (1.875) |
| 4 | 0.856 | -0.081 | | | | | | | -3.84 | 1.914 |
| | (4.232)*** | (-0.609) | | | | | | | (2.136)** | (1.861) |
| 5 | 0.843 | -0.091 | | | | | -0.402 | -3.351 | | 2.27 |
| | (4.245)*** | (-0.731) | | | | | (-1.578) | (2.08)** | | (2.19) |
| 6 | 0.851 | -0.084 | | | | | -0.399 | | -3.518 | 2.176 |
| | (4.219)*** | (-0.659) | | | | | (-1.553) | | (2.151)** | (2.096) |
| 7 | 0.852 | -0.093 | | | | | | -3.481 | -3.556 | 2.262 |
| | (4.297)*** | (-0.731) | | | | | | (2.051)** | (2.138)** | (2.181) |
| 8 | 0.843 | -0.091 | | | | | -0.375 | -3.235 | -3.229 | 2.48 |
| | (4.248)*** | (-0.743) | | | | | (-1.55) | (2.07)** | (2.132)** | (2.373) |
| 9 | 0.837 | -0.09 | -0.017 | 0.146 | | | | | | 2.765 |
| | (4.351)*** | (-0.824) | (-0.229) | (2.324)** | | | | | | (2.685) |
| 10 | 0.798 | -0.049 | -0.007 | 0.136 | | | -0.398 | | | 2.98 |
| | (4.111)*** | (-0.439) | (-0.095) | (2.161)** | | | (-1.533) | | | (2.873) |
| 11 | 0.79 | -0.049 | -0.005 | 0.149 | | | | -3.527 | | 2.951 |
| | (4.06)*** | (-0.439) | (-0.066) | (2.368)** | | | | (1.936)* | | (2.844) |
| 12 | 0.794 | -0.049 | -0.006 | 0.144 | | | | | -3.491 | 2.979 |
| | (4.091)*** | (-0.429) | (-0.077) | (2.258)** | | | | | (2.006)** | (2.873) |
| 13 | 0.792 | -0.05 | -0.006 | 0.14 | | | -0.371 | -3.245 | | 3.12 |
| | (4.077)*** | (-0.466) | (-0.081) | (2.26)** | | | (-1.548) | (2.121)** | | (2.987) |
| 14 | 0.795 | -0.051 | -0.002 | 0.141 | | | -0.348 | | -3.129 | 3.145 |
| | (4.107)*** | (-0.471) | (-0.031) | (2.241)** | | | (-1.545) | | (2.107)** | (3.013) |
| 15 | 0.793 | -0.053 | -0.005 | 0.141 | | | | -3.422 | -3.295 | 3.139 |
| | (4.098)*** | (-0.48) | (-0.065) | (2.286)** | | | | (2.025)** | (2.023)** | (3.006) |
| 16 | 0.796 | -0.056 | -0.004 | 0.138 | | | -0.329 | -3.005 | -2.892 | 3.28 |
| | (4.125)*** | (-0.53) | (-0.059) | (2.259)** | | | (-1.548) | (2.143)** | (2.118)** | (3.121) |
| 17 | 0.819 | -0.075 | -0.014 | 0.141 | -0.006 | 0.075 | | | | 3.112 |
| | (4.253)*** | (-0.686) | (-0.197) | (2.292)** | (-0.138) | (1.76)* | | | | (2.98) |
| 18 | 0.789 | -0.042 | -0.005 | 0.136 | -0.014 | 0.068 | -0.411 | | | 3.298 |
| | (4.064)*** | (-0.375) | (-0.071) | (2.201)** | (-0.308) | (1.603) | (-1.507) | | | (3.14) |
| 19 | 0.777 | -0.037 | -0.003 | 0.147 | -0.012 | 0.07 | | -3.589 | | 3.276 |
| | (3.988)*** | (-0.329) | (-0.048) | (2.392)** | (-0.251) | (1.67)* | | (1.933)* | | (3.117) |
| 20 | 0.781 | -0.037 | -0.003 | 0.143 | -0.018 | 0.07 | | | -3.553 | 3.294 |
| | (4.019)*** | (-0.324) | (-0.047) | (2.309)** | (-0.381) | (1.659)* | | | (1.987)** | (3.135) |
| 21 | 0.786 | -0.045 | -0.004 | 0.137 | -0.008 | 0.068 | -0.382 | -3.298 | | 3.417 |
| | (4.04)*** | (-0.412) | (-0.06) | (2.28)** | (-0.187) | (1.635) | (-1.509) | (2.078)** | | (3.232) |
| 22 | 0.784 | -0.04 | -0.001 | 0.139 | -0.013 | 0.068 | -0.368 | | -3.226 | 3.432 |
| | (4.05)*** | (-0.367) | (-0.01) | (2.261)** | (-0.276) | (1.595) | (-1.523) | | (2.092)** | (3.247) |
| 23 | 0.785 | -0.044 | -0.004 | 0.138 | -0.011 | 0.069 | | -3.408 | -3.26 | 3.434 |
| | (4.047)*** | (-0.395) | (-0.059) | (2.301)** | (-0.251) | (1.685)* | | (2.006)** | (1.969)** | (3.249) |
| 24 | 0.789 | -0.049 | -0.003 | 0.135 | -0.007 | 0.067 | -0.343 | -3.055 | -2.924 | 3.554 |
| | (4.077)*** | (-0.46) | (-0.038) | (2.27)** | (-0.156) | (1.635) | (-1.501) | (2.089)** | (2.056)** | (3.342) |

| # | $\hat{\lambda}_{\text{intercept}}$ | $\hat{\lambda}_{\beta_{MktRF}}$ | $\hat{\lambda}_{\beta_{SMB}}$ | $\hat{\lambda}_{\beta_{HML}}$ | $\hat{\lambda}_{\beta_{RMW}}$ | $\hat{\lambda}_{\beta_{CMA}}$ | $\hat{\lambda}_{\beta_{INDew}}$ | $\hat{\lambda}_{\beta_{MKTew}}$ | $\hat{\lambda}_{\beta_{FIRMew}}$ | $R^2$, $\bar{R}^2$ (in %) |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.905 | -0.111 | | | | | | | | 1.604 |
| | (4.528)*** | (-0.874) | | | | | | | | (1.577) |
| 2 | 0.883 | -0.088 | | | | | -3.668 | | | 1.871 |
| | (4.416)*** | (-0.682) | | | | | (1.919)* | | | (1.817) |
| 3 | 0.844 | -0.076 | | | | | | -2.385 | | 1.881 |
| | (4.187)*** | (-0.583) | | | | | | (1.862)* | | (1.827) |
| 4 | 0.839 | -0.057 | | | | | | | -16.537 | 1.883 |
| | (4.186)*** | (-0.427) | | | | | | | (3.073)*** | (1.829) |
| 5 | 0.846 | -0.073 | | | | | -3.663 | -2.332 | | 2.11 |
| | (4.218)*** | (-0.577) | | | | | (2.06)** | (1.915)* | | (2.03) |
| 6 | 0.834 | -0.045 | | | | | -3.725 | | -16.838 | 2.134 |
| | (4.159)*** | (-0.342) | | | | | (2.036)** | | (3.061)*** | (2.053) |
| 7 | 0.835 | -0.052 | | | | | | -2.356 | -16.057 | 2.147 |
| | (4.132)*** | (-0.403) | | | | | | (1.871)* | (3.102)*** | (2.066) |
| 8 | 0.833 | -0.045 | | | | | -3.649 | -2.361 | -15.875 | 2.35 |
| | (4.13)*** | (-0.358) | | | | | (2.114)** | (1.956)* | (3.123)*** | (2.243) |
| 9 | 0.837 | -0.09 | -0.017 | 0.146 | | | | | | 2.765 |
| | (4.351)*** | (-0.824) | (-0.229) | (2.324)** | | | | | | (2.685) |
| 10 | 0.821 | -0.078 | -0.014 | 0.142 | | | -3.567 | | | 2.915 |
| | (4.265)*** | (-0.68) | (-0.185) | (2.255)** | | | (1.786)* | | | (2.809) |
| 11 | 0.795 | -0.05 | -0.006 | 0.145 | | | | -2.368 | | 2.939 |
| | (4.103)*** | (-0.45) | (-0.087) | (2.324)** | | | | (1.898)* | | (2.833) |
| 12 | 0.78 | -0.042 | -0.009 | 0.138 | | | | | -17.182 | 2.983 |
| | (4.069)*** | (-0.361) | (-0.127) | (2.135)** | | | | | (3.088)*** | (2.877) |
| 13 | 0.797 | -0.056 | -0.007 | 0.143 | | | -3.392 | -2.324 | | 3.078 |
| | (4.12)*** | (-0.506) | (-0.094) | (2.298)** | | | (1.91)* | (1.954)* | | (2.945) |
| 14 | 0.776 | -0.042 | -0.007 | 0.134 | | | -3.508 | | -16.866 | 3.104 |
| | (4.038)*** | (-0.36) | (-0.091) | (2.083)** | | | (1.84)* | | (3.037)*** | (2.971) |
| 15 | 0.778 | -0.039 | -0.006 | 0.139 | | | | -2.28 | -16.168 | 3.161 |
| | (4.009)*** | (-0.351) | (-0.074) | (2.199)** | | | | (1.925)* | (3.239)*** | (3.028) |
| 16 | 0.775 | -0.039 | -0.004 | 0.135 | | | -3.415 | -2.312 | -15.954 | 3.271 |
| | (3.987)*** | (-0.351) | (-0.057) | (2.135)** | | | (1.985)** | (1.948)* | (3.195)*** | (3.112) |
| 17 | 0.819 | -0.075 | -0.014 | 0.141 | -0.006 | 0.075 | | | | 3.112 |
| | (4.253)*** | (-0.686) | (-0.197) | (2.292)** | (-0.138) | (1.76)* | | | | (2.98) |
| 18 | 0.807 | -0.064 | -0.014 | 0.14 | -0.01 | 0.074 | -3.712 | | | 3.261 |
| | (4.172)*** | (-0.558) | (-0.196) | (2.289)** | (-0.219) | (1.742)* | (1.71)* | | | (3.102) |
| 19 | 0.781 | -0.037 | -0.004 | 0.143 | -0.01 | 0.069 | | -2.445 | | 3.268 |
| | (4.012)*** | (-0.335) | (-0.056) | (2.334)** | (-0.21) | (1.626) | | (1.907)* | | (3.109) |
| 20 | 0.767 | -0.03 | -0.008 | 0.137 | -0.009 | 0.065 | | | -18.051 | 3.301 |
| | (3.995)*** | (-0.261) | (-0.109) | (2.176)** | (-0.183) | (1.501) | | | (3.052)*** | (3.142) |
| 21 | 0.785 | -0.044 | -0.007 | 0.142 | -0.01 | 0.07 | -3.393 | -2.418 | | 3.401 |
| | (4.04)*** | (-0.399) | (-0.104) | (2.345)** | (-0.206) | (1.675)* | (1.787)* | (1.95)* | | (3.215) |
| 22 | 0.768 | -0.032 | -0.01 | 0.133 | -0.008 | 0.066 | -3.565 | | -17.439 | 3.425 |
| | (3.99)*** | (-0.28) | (-0.133) | (2.127)** | (-0.17) | (1.529) | (1.775)* | | (3.004)*** | (3.24) |
| 23 | 0.767 | -0.029 | -0.004 | 0.138 | -0.007 | 0.066 | | -2.397 | -16.84 | 3.453 |
| | (3.952)*** | (-0.258) | (-0.061) | (2.246)** | (-0.153) | (1.531) | | (1.971)** | (3.263)*** | (3.268) |
| 24 | 0.768 | -0.03 | -0.007 | 0.136 | -0.008 | 0.065 | -3.482 | -2.448 | -16.786 | 3.565 |
| | (3.948)*** | (-0.268) | (-0.103) | (2.212)** | (-0.162) | (1.535) | (1.856)* | (1.94)* | (3.131)*** | (3.354) |

### 1.2.3 Newey-West t-statistics, dataset is same as controls

| # | $\hat{\lambda}_{\text{intercept}}$ | $\hat{\lambda}_{\beta_{MktRF}}$ | $\hat{\lambda}_{\beta_{SMB}}$ | $\hat{\lambda}_{\beta_{HML}}$ | $\hat{\lambda}_{\beta_{RMW}}$ | $\hat{\lambda}_{\beta_{CMA}}$ | $\hat{\lambda}_{\beta_{INDvw}}$ | $\hat{\lambda}_{\beta_{MKTvw}}$ | $\hat{\lambda}_{\beta_{FIRMvw}}$ | $R^2$, $\bar{R}^2$ (in %) |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.869 | -0.053 | | | | | | | | 1.604 |
| | (4.569)*** | (-0.416) | | | | | | | | (1.564) |
| 2 | 0.826 | -0.021 | | | | | -0.368 | | | 1.933 |
| | (4.25)*** | (-0.162) | | | | | (-1.532) | | | (1.854) |
| 3 | 0.812 | -0.031 | | | | | | -3.092 | | 1.93 |
| | (4.269)*** | (-0.246) | | | | | | (2.165)** | | (1.851) |
| 4 | 0.822 | -0.022 | | | | | | | -3.67 | 1.95 |
| | (4.241)*** | (-0.169) | | | | | | | (2.283)** | (1.871) |
| 5 | 0.811 | -0.031 | | | | | -0.356 | -3.09 | | 2.353 |
| | (4.263)*** | (-0.256) | | | | | (-1.475) | (2.113)** | | (2.235) |
| 6 | 0.822 | -0.032 | | | | | -0.345 | | -3.4 | 2.241 |
| | (4.227)*** | (-0.258) | | | | | (-1.562) | | (2.348)** | (2.123) |
| 7 | 0.842 | -0.052 | | | | | | -2.482 | -2.721 | 2.285 |
| | (4.44)*** | (-0.428) | | | | | | (2.201)** | (2.198)** | (2.167) |
| 8 | 0.824 | -0.043 | | | | | -0.262 | -2.517 | -2.652 | 2.572 |
| | (4.333)*** | (-0.363) | | | | | (-1.312) | (2.095)** | (2.104)** | (2.415) |
| 9 | 0.804 | -0.048 | 0.021 | 0.154 | | | | | | 2.89 |
| | (4.361)*** | (-0.443) | (0.289) | (2.573)** | | | | | | (2.773) |
| 10 | 0.768 | -0.014 | 0.035 | 0.142 | | | -0.343 | | | 3.133 |
| | (4.11)*** | (-0.129) | (0.479) | (2.384)** | | | (-1.608) | | | (2.978) |
| 11 | 0.778 | -0.029 | 0.033 | 0.156 | | | | -2.883 | | 3.094 |
| | (4.178)*** | (-0.267) | (0.442) | (2.628)*** | | | | (2.064)** | | (2.939) |
| 12 | 0.765 | -0.013 | 0.037 | 0.149 | | | | | -3.485 | 3.133 |
| | (4.102)*** | (-0.116) | (0.506) | (2.459)** | | | | | (2.273)** | (2.977) |
| 13 | 0.766 | -0.017 | 0.036 | 0.147 | | | -0.335 | -2.981 | | 3.293 |
| | (4.104)*** | (-0.155) | (0.492) | (2.487)** | | | (-1.53) | (2.071)** | | (3.099) |
| 14 | 0.765 | -0.019 | 0.041 | 0.149 | | | -0.323 | | -3.187 | 3.315 |
| | (4.104)*** | (-0.18) | (0.567) | (2.488)** | | | (1.671)* | | (2.409)** | (3.121) |
| 15 | 0.792 | -0.039 | 0.033 | 0.147 | | | | -2.561 | -2.758 | 3.298 |
| | (4.278)*** | (-0.371) | (0.455) | (2.483)** | | | | (1.973)** | (2.102)** | (3.104) |
| 16 | 0.781 | -0.035 | 0.039 | 0.145 | | | -0.247 | -2.468 | -2.577 | 3.463 |
| | (4.215)*** | (-0.339) | (0.539) | (2.466)** | | | (-1.357) | (1.991)** | (2.112)** | (3.231) |
| 17 | 0.793 | -0.04 | 0.023 | 0.152 | -0.007 | 0.067 | | | | 3.299 |
| | (4.283)*** | (-0.376) | (0.32) | (2.594)*** | (-0.16) | (1.577) | | | | (3.106) |
| 18 | 0.765 | -0.013 | 0.035 | 0.143 | -0.011 | 0.057 | -0.36 | | | 3.502 |
| | (4.075)*** | (-0.117) | (0.49) | (2.451)** | (-0.252) | (1.336) | (-1.6) | | | (3.27) |
| 19 | 0.769 | -0.022 | 0.032 | 0.155 | -0.009 | 0.066 | | -3.01 | | 3.471 |
| | (4.103)*** | (-0.202) | (0.45) | (2.663)*** | (-0.206) | (1.559) | | (2.028)** | | (3.239) |
| 20 | 0.761 | -0.011 | 0.037 | 0.15 | -0.015 | 0.062 | | | -3.531 | 3.504 |
| | (4.062)*** | (-0.1) | (0.515) | (2.538)** | (-0.326) | (1.461) | | | (2.289)** | (3.272) |
| 21 | 0.765 | -0.017 | 0.034 | 0.146 | -0.008 | 0.059 | -0.349 | -3.045 | | 3.637 |
| | (4.084)*** | (-0.157) | (0.479) | (2.53)** | (-0.174) | (1.421) | (-1.519) | (2.041)** | | (3.367) |
| 22 | 0.764 | -0.017 | 0.04 | 0.15 | -0.013 | 0.059 | -0.353 | | -3.317 | 3.66 |
| | (4.07)*** | (-0.16) | (0.567) | (2.542)** | (-0.289) | (1.406) | (-1.599) | | (2.323)** | (3.389) |
| 23 | 0.784 | -0.032 | 0.033 | 0.146 | -0.009 | 0.068 | | -2.66 | -2.867 | 3.651 |
| | (4.206)*** | (-0.301) | (0.462) | (2.534)** | (-0.22) | (1.633) | | (1.978)** | (2.118)** | (3.38) |
| 24 | 0.782 | -0.035 | 0.038 | 0.144 | -0.007 | 0.063 | -0.26 | -2.474 | -2.619 | 3.79 |
| | (4.19)*** | (-0.339) | (0.532) | (2.512)** | (-0.17) | (1.537) | (-1.335) | (1.962)* | (2.094)** | (3.481) |

| # | $\hat{\lambda}_{\text{intercept}}$ | $\hat{\lambda}_{\beta_{MktRF}}$ | $\hat{\lambda}_{\beta_{SMB}}$ | $\hat{\lambda}_{\beta_{HML}}$ | $\hat{\lambda}_{\beta_{RMW}}$ | $\hat{\lambda}_{\beta_{CMA}}$ | $\hat{\lambda}_{\beta_{INDew}}$ | $\hat{\lambda}_{\beta_{MKTew}}$ | $\hat{\lambda}_{\beta_{FIRMew}}$ | $R^2$, $\bar{R}^2$ (in %) |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.869 | -0.053 | | | | | | | | 1.604 |
| | (4.569)*** | (-0.416) | | | | | | | | (1.564) |
| 2 | 0.87 | -0.054 | | | | | -3.423 | | | 1.916 |
| | (4.573)*** | (-0.452) | | | | | (2.755)*** | | | (1.837) |
| 3 | 0.825 | -0.037 | | | | | | -1.948 | | 1.889 |
| | (4.292)*** | (-0.294) | | | | | | (1.981)** | | (1.81) |
| 4 | 0.807 | 0 | | | | | | | -14.634 | 1.938 |
| | (4.204)*** | (0.003) | | | | | | | (2.959)*** | (1.859) |
| 5 | 0.836 | -0.039 | | | | | -3.058 | -1.651 | | 2.183 |
| | (4.351)*** | (-0.33) | | | | | (2.781)*** | (2.267)** | | (2.065) |
| 6 | 0.833 | -0.016 | | | | | -3.419 | | -11.747 | 2.232 |
| | (4.325)*** | (-0.133) | | | | | (2.947)*** | | (3.299)*** | (2.114) |
| 7 | 0.825 | -0.012 | | | | | | -1.796 | -11.989 | 2.189 |
| | (4.276)*** | (-0.1) | | | | | | (2.058)** | (3.206)*** | (2.071) |
| 8 | 0.838 | -0.019 | | | | | -3.068 | -1.633 | -11.025 | 2.448 |
| | (4.314)*** | (-0.159) | | | | | (2.982)*** | (2.388)** | (3.239)*** | (2.292) |
| 9 | 0.804 | -0.048 | 0.021 | 0.154 | | | | | | 2.89 |
| | (4.361)*** | (-0.443) | (0.289) | (2.573)** | | | | | | (2.773) |
| 10 | 0.809 | -0.055 | 0.024 | 0.15 | | | -3.24 | | | 3.073 |
| | (4.396)*** | (-0.53) | (0.321) | (2.537)** | | | (2.664)*** | | | (2.918) |
| 11 | 0.787 | -0.036 | 0.031 | 0.151 | | | | -1.844 | | 3.083 |
| | (4.253)*** | (-0.338) | (0.425) | (2.562)** | | | | (2.075)** | | (2.927) |
| 12 | 0.752 | -0.004 | 0.032 | 0.146 | | | | | -15.256 | 3.154 |
| | (4.095)*** | (-0.034) | (0.432) | (2.371)** | | | | | (3.297)*** | (2.998) |
| 13 | 0.79 | -0.043 | 0.035 | 0.15 | | | -2.756 | -1.591 | | 3.265 |
| | (4.254)*** | (-0.416) | (0.474) | (2.56)** | | | (2.64)*** | (2.344)** | | (3.071) |
| 14 | 0.772 | -0.024 | 0.033 | 0.141 | | | -3.144 | | -12 | 3.296 |
| | (4.174)*** | (-0.23) | (0.442) | (2.323)** | | | (2.76)*** | | (3.57)*** | (3.103) |
| 15 | 0.771 | -0.022 | 0.033 | 0.144 | | | | -1.639 | -12.5 | 3.342 |
| | (4.159)*** | (-0.213) | (0.451) | (2.4)** | | | | (2.079)** | (3.653)*** | (3.149) |
| 16 | 0.778 | -0.033 | 0.037 | 0.142 | | | -2.831 | -1.518 | -11.634 | 3.479 |
| | (4.158)*** | (-0.324) | (0.501) | (2.391)** | | | (2.841)*** | (2.358)** | (3.643)*** | (3.247) |
| 17 | 0.793 | -0.04 | 0.023 | 0.152 | -0.007 | 0.067 | | | | 3.299 |
| | (4.283)*** | (-0.376) | (0.32) | (2.594)*** | (-0.16) | (1.577) | | | | (3.106) |
| 18 | 0.8 | -0.045 | 0.023 | 0.148 | -0.005 | 0.069 | -3.239 | | | 3.472 |
| | (4.32)*** | (-0.444) | (0.325) | (2.563)** | (-0.105) | (1.608) | (2.517)** | | | (3.24) |
| 19 | 0.779 | -0.029 | 0.031 | 0.149 | -0.008 | 0.063 | | -1.934 | | 3.467 |
| | (4.174)*** | (-0.275) | (0.437) | (2.58)** | (-0.187) | (1.491) | | (2.101)** | | (3.234) |
| 20 | 0.744 | 0.001 | 0.033 | 0.145 | -0.01 | 0.06 | | | -15.62 | 3.52 |
| | (4.029)*** | (0.005) | (0.461) | (2.417)** | (-0.227) | (1.363) | | | (3.451)*** | (3.288) |
| 21 | 0.786 | -0.038 | 0.032 | 0.147 | -0.003 | 0.063 | -2.618 | -1.629 | | 3.639 |
| | (4.209)*** | (-0.372) | (0.453) | (2.573)** | (-0.071) | (1.506) | (2.448)** | (2.379)** | | (3.369) |
| 22 | 0.761 | -0.016 | 0.031 | 0.138 | -0.007 | 0.061 | -3.08 | | -12.435 | 3.667 |
| | (4.098)*** | (-0.15) | (0.438) | (2.361)** | (-0.17) | (1.396) | (2.459)** | | (3.642)*** | (3.396) |
| 23 | 0.759 | -0.015 | 0.036 | 0.141 | -0.006 | 0.059 | | -1.759 | -12.919 | 3.677 |
| | (4.081)*** | (-0.146) | (0.498) | (2.416)** | (-0.146) | (1.369) | | (2.203)** | (3.787)*** | (3.406) |
| 24 | 0.768 | -0.026 | 0.036 | 0.139 | -0.005 | 0.059 | -2.637 | -1.623 | -11.714 | 3.816 |
| | (4.1)*** | (-0.258) | (0.513) | (2.418)** | (-0.113) | (1.396) | (2.56)** | (2.465)** | (3.691)*** | (3.507) |

### 1.2.4 Newey-West t-statistics, controls

| # | $\hat{\lambda}_{\text{intercept}}$ | $\hat{\lambda}_{\beta_{MktRF}}$ | $\hat{\lambda}_{\beta_{SMB}}$ | $\hat{\lambda}_{\beta_{HML}}$ | $\hat{\lambda}_{\beta_{RMW}}$ | $\hat{\lambda}_{\beta_{CMA}}$ | $\hat{\lambda}_{\beta_{INDvw}}$ | $\hat{\lambda}_{\beta_{MKTvw}}$ | $\hat{\lambda}_{\beta_{FIRMvw}}$ | $\hat{\lambda}_{\text{ln.BM}}$ | $\hat{\lambda}_{\text{ln.ME}}$ | $R^2$, $\bar{R}^2$ (in %) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.869 | -0.053 | | | | | | | | | | 1.604 |
| | (4.569)*** | (-0.416) | | | | | | | | | | (1.564) |
| 2 | 1.286 | -0.015 | | | | | -0.341 | | | | -0.105 | 3.102 |
| | (3.917)*** | (-0.113) | | | | | (-1.409) | | | | (2.659)*** | (2.986) |
| 3 | 0.86 | 0.043 | | | | | -0.375 | | | 0.358 | | 2.433 |
| | (4.349)*** | (0.344) | | | | | (-1.536) | | | (5.588)*** | | (2.315) |
| 4 | 1.16 | 0.045 | | | | | -0.361 | | | 0.276 | -0.071 | 3.536 |
| | (3.534)*** | (0.376) | | | | | (-1.487) | | | (4.005)*** | (1.694)* | (3.381) |
| 5 | 1.144 | 0.028 | | | | | | -2.818 | | 0.272 | -0.068 | 3.477 |
| | (3.558)*** | (0.238) | | | | | | (2.009)** | | (3.937)*** | (-1.644) | (3.322) |
| 6 | 1.144 | 0.042 | | | | | | | -3.339 | 0.281 | -0.068 | 3.549 |
| | (3.497)*** | (0.348) | | | | | | | (2.071)** | (4.025)*** | (-1.64) | (3.394) |
| 7 | 1.159 | 0.043 | | | | | -0.349 | -2.889 | | 0.274 | -0.071 | 3.743 |
| | (3.61)*** | (0.369) | | | | | (-1.434) | (1.991)** | | (3.983)*** | (1.748)* | (3.55) |
| 8 | 1.143 | 0.039 | | | | | -0.323 | | -3.02 | 0.28 | -0.068 | 3.759 |
| | (3.515)*** | (0.337) | | | | | (-1.47) | | (2.089)** | (4.025)*** | (1.662)* | (3.566) |
| 9 | 1.192 | 0.019 | | | | | | -2.277 | -2.476 | 0.28 | -0.072 | 3.731 |
| | (3.698)*** | (0.166) | | | | | | (2.051)** | (1.979)** | (4.007)*** | (1.759)* | (3.538) |
| 10 | 1.171 | 0.029 | | | | | -0.253 | -2.302 | -2.388 | 0.28 | -0.071 | 3.937 |
| | (3.653)*** | (0.262) | | | | | (-1.257) | (1.942)* | (1.881)* | (4.016)*** | (1.757)* | (3.706) |
| 11 | 0.804 | -0.048 | 0.021 | 0.154 | | | | | | | | 2.89 |
| | (4.361)*** | (-0.443) | (0.289) | (2.573)** | | | | | | | | (2.773) |
| 12 | 1.298 | 0.032 | -0.042 | 0.127 | | | -0.317 | | | | -0.112 | 3.848 |
| | (4.316)*** | (0.282) | (-0.682) | (2.124)** | | | (-1.464) | | | | (3.218)*** | (3.655) |
| 13 | 0.828 | 0.032 | 0.03 | 0.066 | | | -0.339 | | | 0.316 | | 3.498 |
| | (4.292)*** | (0.309) | (0.417) | (1.198) | | | (-1.565) | | | (5.273)*** | | (3.305) |
| 14 | 1.18 | 0.061 | -0.015 | 0.064 | | | -0.329 | | | 0.246 | -0.079 | 4.175 |
| | (3.93)*** | (0.573) | (-0.259) | (1.209) | | | (-1.511) | | | (3.902)*** | (2.173)** | (3.944) |
| 15 | 1.19 | 0.049 | -0.019 | 0.078 | | | | -2.723 | | 0.24 | -0.08 | 4.133 |
| | (3.978)*** | (0.462) | (-0.325) | (1.471) | | | | (1.965)* | | (3.817)*** | (2.192)** | (3.902) |
| 16 | 1.178 | 0.065 | -0.016 | 0.072 | | | | | -3.177 | 0.247 | -0.08 | 4.179 |
| | (3.935)*** | (0.596) | (-0.269) | (1.322) | | | | | (2.037)** | (3.884)*** | (2.187)** | (3.949) |
| 17 | 1.17 | 0.061 | -0.015 | 0.067 | | | -0.326 | -2.855 | | 0.25 | -0.078 | 4.324 |
| | (3.897)*** | (0.571) | (-0.253) | (1.276) | | | (-1.456) | (1.983)** | | (3.962)*** | (2.14)** | (4.055) |
| 18 | 1.178 | 0.055 | -0.013 | 0.071 | | | -0.301 | | -2.844 | 0.246 | -0.079 | 4.351 |
| | (3.932)*** | (0.523) | (-0.23) | (1.322) | | | (-1.544) | | (2.128)** | (3.881)*** | (2.172)** | (4.083) |
| 19 | 1.207 | 0.041 | -0.021 | 0.068 | | | | -2.445 | -2.5 | 0.254 | -0.08 | 4.328 |
| | (4.046)*** | (0.392) | (-0.363) | (1.287) | | | | (1.883)* | (1.862)* | (3.98)*** | (2.211)** | (4.06) |
| 20 | 1.188 | 0.042 | -0.015 | 0.066 | | | -0.237 | -2.328 | -2.311 | 0.254 | -0.078 | 4.489 |
| | (3.965)*** | (0.405) | (-0.256) | (1.257) | | | (-1.277) | (1.888)* | (1.857)* | (3.992)*** | (2.144)** | (4.183) |
| 21 | 0.793 | -0.04 | 0.023 | 0.152 | -0.007 | 0.067 | | | | | | 3.299 |
| | (4.283)*** | (-0.376) | (0.32) | (2.594)*** | (-0.16) | (1.577) | | | | | | (3.106) |
| 22 | 1.302 | 0.036 | -0.043 | 0.123 | 0.013 | 0.046 | -0.332 | | | | -0.113 | 4.189 |
| | (4.325)*** | (0.332) | (-0.731) | (2.101)** | (0.299) | (1.06) | (-1.462) | | | | (3.282)*** | (3.92) |
| 23 | 0.829 | 0.034 | 0.029 | 0.067 | 0.003 | 0.018 | -0.356 | | | 0.316 | | 3.855 |
| | (4.29)*** | (0.328) | (0.417) | (1.236) | (0.078) | (0.443) | (-1.559) | | | (5.333)*** | | (3.585) |
| 24 | 1.188 | 0.066 | -0.016 | 0.06 | 0.016 | 0.015 | -0.343 | | | 0.248 | -0.08 | 4.509 |
| | (3.938)*** | (0.625) | (-0.284) | (1.162) | (0.408) | (0.372) | (-1.504) | | | (3.916)*** | (2.214)** | (4.203) |
| 25 | 1.194 | 0.058 | -0.02 | 0.072 | 0.018 | 0.023 | | -2.824 | | 0.244 | -0.081 | 4.476 |
| | (3.966)*** | (0.551) | (-0.349) | (1.389) | (0.464) | (0.57) | | (1.92)* | | (3.872)*** | (2.235)** | (4.17) |
| 26 | 1.188 | 0.069 | -0.017 | 0.067 | 0.015 | 0.02 | | | -3.208 | 0.25 | -0.081 | 4.515 |
| | (3.945)*** | (0.641) | (-0.294) | (1.271) | (0.366) | (0.492) | | | (2.051)** | (3.923)*** | (2.231)** | (4.209) |
| 27 | 1.186 | 0.063 | -0.017 | 0.063 | 0.019 | 0.017 | -0.336 | -2.883 | | 0.25 | -0.08 | 4.638 |
| | (3.93)*** | (0.598) | (-0.31) | (1.23) | (0.495) | (0.425) | (-1.443) | (1.942)* | | (3.969)*** | (2.208)** | (4.294) |
| 28 | 1.193 | 0.06 | -0.014 | 0.067 | 0.017 | 0.018 | -0.33 | | -2.969 | 0.248 | -0.081 | 4.664 |
| | (3.952)*** | (0.575) | (-0.258) | (1.277) | (0.422) | (0.445) | (-1.494) | | (2.065)** | (3.899)*** | (2.236)** | (4.32) |
| 29 | 1.218 | 0.049 | -0.022 | 0.063 | 0.019 | 0.025 | | -2.525 | -2.607 | 0.255 | -0.082 | 4.651 |
| | (4.051)*** | (0.471) | (-0.386) | (1.216) | (0.498) | (0.632) | | (1.881)* | (1.889)* | (4.001)*** | (2.276)** | (4.307) |
| 30 | 1.211 | 0.044 | -0.017 | 0.062 | 0.021 | 0.021 | -0.249 | -2.316 | -2.352 | 0.255 | -0.081 | 4.787 |
| | (4.014)*** | (0.436) | (-0.303) | (1.205) | (0.551) | (0.546) | (-1.266) | (1.853)* | (1.85)* | (3.998)*** | (2.239)** | (4.406) |

| # | $\hat{\lambda}_{\text{intercept}}$ | $\hat{\lambda}_{\beta_{MktRF}}$ | $\hat{\lambda}_{\beta_{SMB}}$ | $\hat{\lambda}_{\beta_{HML}}$ | $\hat{\lambda}_{\beta_{RMW}}$ | $\hat{\lambda}_{\beta_{CMA}}$ | $\hat{\lambda}_{\beta_{INDew}}$ | $\hat{\lambda}_{\beta_{MKTew}}$ | $\hat{\lambda}_{\beta_{FIRMew}}$ | $\hat{\lambda}_{\text{ln.BM}}$ | $\hat{\lambda}_{\text{ln.ME}}$ | $R^2$, $\bar{R}^2$ (in %) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.869 | -0.053 | | | | | | | | | | 1.604 |
| | (4.569)*** | (-0.416) | | | | | | | | | | (1.564) |
| 2 | 1.347 | -0.041 | | | | | -3.668 | | | | -0.109 | 3.059 |
| | (4.1)*** | (-0.338) | | | | | (2.74)*** | | | | (2.746)*** | (2.942) |
| 3 | 0.904 | 0 | | | | | -3.347 | | | 0.334 | | 2.41 |
| | (4.659)*** | (0.001) | | | | | (2.707)*** | | | (5.275)*** | | (2.292) |
| 4 | 1.231 | 0.007 | | | | | -3.499 | | | 0.251 | -0.078 | 3.489 |
| | (3.736)*** | (0.066) | | | | | (2.699)*** | | | (3.636)*** | (1.835)* | (3.334) |
| 5 | 1.159 | 0.026 | | | | | | -1.91 | | 0.263 | -0.07 | 3.451 |
| | (3.576)*** | (0.229) | | | | | | (1.989)** | | (3.844)*** | (1.681)* | (3.296) |
| 6 | 1.165 | 0.059 | | | | | | | -14.336 | 0.276 | -0.075 | 3.549 |
| | (3.576)*** | (0.478) | | | | | | | (2.866)*** | (3.917)*** | (1.775)* | (3.394) |
| 7 | 1.195 | 0.02 | | | | | -3.116 | -1.566 | | 0.256 | -0.075 | 3.686 |
| | (3.674)*** | (0.183) | | | | | (2.706)*** | (2.249)** | | (3.719)*** | (1.791)* | (3.493) |
| 8 | 1.216 | 0.04 | | | | | -3.454 | | -11.113 | 0.263 | -0.08 | 3.75 |
| | (3.686)*** | (0.347) | | | | | (2.856)*** | | (3.149)*** | (3.72)*** | (1.89)* | (3.557) |
| 9 | 1.208 | 0.045 | | | | | | -1.739 | -11.773 | 0.273 | -0.079 | 3.711 |
| | (3.7)*** | (0.391) | | | | | | (2.047)** | (3.13)*** | (3.912)*** | (1.869)* | (3.518) |
| 10 | 1.242 | 0.036 | | | | | -3.132 | -1.522 | -10.551 | 0.263 | -0.083 | 3.906 |
| | (3.767)*** | (0.325) | | | | | (2.894)*** | (2.314)** | (3.092)*** | (3.738)*** | (1.969)** | (3.674) |
| 11 | 0.804 | -0.048 | 0.021 | 0.154 | | | | | | | | 2.89 |
| | (4.361)*** | (-0.443) | (0.289) | (2.573)** | | | | | | | | (2.773) |
| 12 | 1.354 | -0.005 | -0.056 | 0.135 | | | -3.395 | | | | -0.115 | 3.793 |
| | (4.5)*** | (-0.046) | (-0.897) | (2.287)** | | | (2.589)*** | | | | (3.289)*** | (3.6) |
| 13 | 0.865 | -0.007 | 0.017 | 0.074 | | | -3.172 | | | 0.312 | | 3.439 |
| | (4.534)*** | (-0.074) | (0.232) | (1.363) | | | (2.61)*** | | | (5.146)*** | | (3.245) |
| 14 | 1.238 | 0.025 | -0.031 | 0.074 | | | -3.289 | | | 0.239 | -0.084 | 4.121 |
| | (4.119)*** | (0.248) | (-0.526) | (1.419) | | | (2.581)** | | | (3.755)*** | (2.285)** | (3.891) |
| 15 | 1.204 | 0.037 | -0.022 | 0.073 | | | | -1.771 | | 0.237 | -0.08 | 4.118 |
| | (4.031)*** | (0.352) | (-0.372) | (1.393) | | | | (2.001)** | | (3.782)*** | (2.189)** | (3.887) |
| 16 | 1.161 | 0.073 | -0.017 | 0.068 | | | | | -14.038 | 0.249 | -0.079 | 4.205 |
| | (3.898)*** | (0.652) | (-0.283) | (1.25) | | | | | (2.958)*** | (3.906)*** | (2.137)** | (3.974) |
| 17 | 1.218 | 0.03 | -0.022 | 0.072 | | | -2.814 | -1.488 | | 0.239 | -0.082 | 4.296 |
| | (4.071)*** | (0.296) | (-0.378) | (1.393) | | | (2.544)** | (2.255)** | | (3.765)*** | (2.258)** | (4.028) |
| 18 | 1.196 | 0.052 | -0.02 | 0.064 | | | -3.19 | | -10.575 | 0.247 | -0.081 | 4.346 |
| | (3.978)*** | (0.498) | (-0.338) | (1.202) | | | (2.672)*** | | (3.106)*** | (3.859)*** | (2.225)** | (4.078) |
| 19 | 1.198 | 0.048 | -0.022 | 0.065 | | | | -1.554 | -11.44 | 0.246 | -0.081 | 4.375 |
| | (4)*** | (0.46) | (-0.38) | (1.228) | | | | (1.986)** | (3.263)*** | (3.884)*** | (2.214)** | (4.107) |
| 20 | 1.216 | 0.037 | -0.022 | 0.064 | | | -2.887 | -1.398 | -10.302 | 0.244 | -0.083 | 4.513 |
| | (4.027)*** | (0.369) | (-0.38) | (1.221) | | | (2.726)*** | (2.235)** | (3.175)*** | (3.809)*** | (2.271)** | (4.207) |
| 21 | 0.793 | -0.04 | 0.023 | 0.152 | -0.007 | 0.067 | | | | | | 3.299 |
| | (4.283)*** | (-0.376) | (0.32) | (2.594)*** | (-0.16) | (1.577) | | | | | | (3.106) |
| 22 | 1.353 | 0.009 | -0.057 | 0.127 | 0.019 | 0.057 | -3.309 | | | | -0.117 | 4.166 |
| | (4.496)*** | (0.083) | (-0.958) | (2.207)** | (0.472) | (1.314) | (2.459)** | | | | (3.37)*** | (3.897) |
| 23 | 0.859 | 0.004 | 0.017 | 0.07 | 0.011 | 0.029 | -3.15 | | | 0.316 | | 3.827 |
| | (4.494)*** | (0.037) | (0.239) | (1.335) | (0.256) | (0.721) | (2.478)** | | | (5.279)*** | | (3.557) |
| 24 | 1.237 | 0.039 | -0.03 | 0.065 | 0.024 | 0.026 | -3.209 | | | 0.245 | -0.085 | 4.487 |
| | (4.102)*** | (0.391) | (-0.539) | (1.286) | (0.614) | (0.658) | (2.458)** | | | (3.842)*** | (2.32)** | (4.181) |
| 25 | 1.206 | 0.048 | -0.022 | 0.065 | 0.019 | 0.021 | | -1.836 | | 0.244 | -0.081 | 4.47 |
| | (4.007)*** | (0.467) | (-0.402) | (1.285) | (0.494) | (0.517) | | (2.012)** | | (3.888)*** | (2.228)** | (4.164) |
| 26 | 1.166 | 0.08 | -0.017 | 0.062 | 0.017 | 0.018 | | | -14.185 | 0.253 | -0.08 | 4.537 |
| | (3.896)*** | (0.73) | (-0.306) | (1.162) | (0.418) | (0.432) | | | (3.095)*** | (3.986)*** | (2.187)** | (4.231) |
| 27 | 1.226 | 0.039 | -0.024 | 0.064 | 0.026 | 0.021 | -2.614 | -1.51 | | 0.244 | -0.083 | 4.642 |
| | (4.067)*** | (0.395) | (-0.422) | (1.27) | (0.669) | (0.536) | (2.365)** | (2.277)** | | (3.846)*** | (2.299)** | (4.298) |
| 28 | 1.197 | 0.064 | -0.022 | 0.056 | 0.021 | 0.019 | -3.052 | | -10.952 | 0.252 | -0.082 | 4.684 |
| | (3.973)*** | (0.623) | (-0.381) | (1.088) | (0.535) | (0.469) | (2.394)** | | (3.179)*** | (3.945)*** | (2.268)** | (4.34) |
| 29 | 1.192 | 0.059 | -0.019 | 0.058 | 0.021 | 0.017 | | -1.665 | -11.73 | 0.252 | -0.081 | 4.682 |
| | (3.96)*** | (0.578) | (-0.339) | (1.117) | (0.559) | (0.408) | | (2.1)** | (3.373)*** | (3.993)*** | (2.24)** | (4.339) |
| 30 | 1.212 | 0.048 | -0.02 | 0.056 | 0.024 | 0.017 | -2.655 | -1.505 | -10.365 | 0.25 | -0.083 | 4.822 |
| | (4.006)*** | (0.493) | (-0.364) | (1.11) | (0.637) | (0.434) | (2.467)** | (2.342)** | (3.219)*** | (3.918)*** | (2.295)** | (4.44) |

## 1.3 Hoberg-Phillips FIC-25 industries

### 1.3.1 Fama-MacBeth t-statistics

| # | $\hat{\lambda}_{\text{intercept}}$ | $\hat{\lambda}_{\beta_{MktRF}}$ | $\hat{\lambda}_{\beta_{SMB}}$ | $\hat{\lambda}_{\beta_{HML}}$ | $\hat{\lambda}_{\beta_{RMW}}$ | $\hat{\lambda}_{\beta_{CMA}}$ | $\hat{\lambda}_{\beta_{INDvw}}$ | $\hat{\lambda}_{\beta_{MKTvw}}$ | $\hat{\lambda}_{\beta_{FIRMvw}}$ | $R^2$, $\bar{R}^2$ (in %) |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.856 | 0.24 | | | | | | | | 1.674 |
| | (2.904)*** | (1.059) | | | | | | | | (1.641) |
| 2 | 0.826 | 0.275 | | | | | -1.8 | | | 1.873 |
| | (2.783)*** | (1.198) | | | | | (2.02)** | | | (1.808) |
| 3 | 0.809 | 0.246 | | | | | | -8.264 | | 1.892 |
| | (2.749)*** | (1.074) | | | | | | (2.189)** | | (1.827) |
| 4 | 0.798 | 0.289 | | | | | | | -6.46 | 1.891 |
| | (2.69)*** | (1.252) | | | | | | | (2.439)** | (1.826) |
| 5 | 0.79 | 0.245 | | | | | -1.554 | -8.083 | | 2.043 |
| | (2.687)*** | (1.082) | | | | | (1.793)* | (2.197)** | | (1.945) |
| 6 | 0.779 | 0.28 | | | | | -1.894 | | -6.447 | 2.038 |
| | (2.648)*** | (1.224) | | | | | (2.135)** | | (2.469)** | (1.941) |
| 7 | 0.801 | 0.25 | | | | | | -8.181 | -5.425 | 2.056 |
| | (2.713)*** | (1.109) | | | | | | (2.225)** | (2.134)** | (1.959) |
| 8 | 0.763 | 0.257 | | | | | -1.6 | -8.321 | -5.565 | 2.171 |
| | (2.606)*** | (1.137) | | | | | (1.864)* | (2.262)** | (2.212)** | (2.042) |
| 9 | 0.838 | 0.289 | -0.002 | 0.142 | | | | | | 2.116 |
| | (2.964)*** | (1.314) | (-0.033) | (1.365) | | | | | | (2.019) |
| 10 | 0.813 | 0.32 | 0.005 | 0.147 | | | -1.76 | | | 2.307 |
| | (2.873)*** | (1.441) | (0.075) | (1.409) | | | (1.995)** | | | (2.178) |
| 11 | 0.839 | 0.286 | 0.012 | 0.15 | | | | -8.267 | | 2.303 |
| | (2.955)*** | (1.287) | (0.165) | (1.402) | | | | (2.148)** | | (2.174) |
| 12 | 0.802 | 0.324 | 0.012 | 0.152 | | | | | -6.369 | 2.317 |
| | (2.834)*** | (1.458) | (0.168) | (1.438) | | | | | (2.389)** | (2.188) |
| 13 | 0.828 | 0.288 | 0.007 | 0.161 | | | -1.557 | -8.332 | | 2.456 |
| | (2.906)*** | (1.311) | (0.097) | (1.56) | | | (1.805)* | (2.214)** | | (2.295) |
| 14 | 0.787 | 0.301 | 0.034 | 0.171 | | | -1.908 | | -6.601 | 2.463 |
| | (2.79)*** | (1.368) | (0.465) | (1.58) | | | (2.143)** | | (2.478)** | (2.302) |
| 15 | 0.837 | 0.287 | 0.006 | 0.153 | | | | -8.31 | -5.27 | 2.462 |
| | (2.939)*** | (1.316) | (0.09) | (1.492) | | | | (2.216)** | (2.057)** | (2.301) |
| 16 | 0.814 | 0.277 | 0.03 | 0.174 | | | -1.605 | -8.446 | -5.557 | 2.59 |
| | (2.869)*** | (1.277) | (0.409) | (1.667)* | | | (1.863)* | (2.251)** | (2.164)** | (2.396) |
| 17 | 0.814 | 0.281 | 0.007 | 0.157 | -0.077 | -0.03 | | | | 2.471 |
| | (2.882)*** | (1.285) | (0.105) | (1.537) | (-0.757) | (-0.503) | | | | (2.31) |
| 18 | 0.788 | 0.317 | 0.016 | 0.161 | -0.091 | -0.032 | -1.963 | | | 2.65 |
| | (2.785)*** | (1.426) | (0.236) | (1.556) | (-0.885) | (-0.542) | (2.137)** | | | (2.457) |
| 19 | 0.812 | 0.29 | 0.017 | 0.161 | -0.077 | -0.024 | | -8.44 | | 2.642 |
| | (2.854)*** | (1.293) | (0.244) | (1.547) | (-0.756) | (-0.416) | | (2.152)** | | (2.449) |
| 20 | 0.78 | 0.322 | 0.018 | 0.165 | -0.09 | -0.033 | | | -6.514 | 2.658 |
| | (2.754)*** | (1.441) | (0.254) | (1.583) | (-0.886) | (-0.546) | | | (2.38)** | (2.465) |
| 21 | 0.812 | 0.29 | 0.006 | 0.168 | -0.064 | -0.011 | -1.699 | -8.506 | | 2.77 |
| | (2.848)*** | (1.31) | (0.084) | (1.681)* | (-0.648) | (-0.194) | (1.911)* | (2.222)** | | (2.545) |
| 22 | 0.776 | 0.31 | 0.03 | 0.171 | -0.081 | -0.036 | -2.025 | | -6.793 | 2.763 |
| | (2.742)*** | (1.402) | (0.421) | (1.627) | (-0.809) | (-0.582) | (2.216)** | | (2.499)** | (2.538) |
| 23 | 0.819 | 0.284 | 0.007 | 0.165 | -0.063 | -0.017 | | -8.333 | -5.357 | 2.779 |
| | (2.868)*** | (1.296) | (0.097) | (1.645) | (-0.641) | (-0.302) | | (2.196)** | (2.045)** | (2.554) |
| 24 | 0.808 | 0.283 | 0.021 | 0.174 | -0.058 | -0.014 | -1.684 | -8.47 | -5.656 | 2.886 |
| | (2.835)*** | (1.292) | (0.298) | (1.725)* | (-0.602) | (-0.255) | (1.911)* | (2.236)** | (2.165)** | (2.629) |

| # | $\hat{\lambda}_{\text{intercept}}$ | $\hat{\lambda}_{\beta_{MktRF}}$ | $\hat{\lambda}_{\beta_{SMB}}$ | $\hat{\lambda}_{\beta_{HML}}$ | $\hat{\lambda}_{\beta_{RMW}}$ | $\hat{\lambda}_{\beta_{CMA}}$ | $\hat{\lambda}_{\beta_{INDew}}$ | $\hat{\lambda}_{\beta_{MKTew}}$ | $\hat{\lambda}_{\beta_{FIRMew}}$ | $R^2$, $\bar{R}^2$ (in %) |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.856 | 0.24 | | | | | | | | 1.674 |
| | (2.904)*** | (1.059) | | | | | | | | (1.641) |
| 2 | 0.784 | 0.319 | | | | | -0.827 | | | 1.9 |
| | (2.652)*** | (1.33) | | | | | (2.425)** | | | (1.836) |
| 3 | 0.797 | 0.274 | | | | | | -6.7 | | 1.905 |
| | (2.719)*** | (1.164) | | | | | | (2.159)** | | (1.841) |
| 4 | 0.785 | 0.308 | | | | | | | -25.904 | 1.864 |
| | (2.655)*** | (1.282) | | | | | | | (2.376)** | (1.799) |
| 5 | 0.776 | 0.285 | | | | | -0.695 | -6.572 | | 2.064 |
| | (2.651)*** | (1.211) | | | | | (2.117)** | (2.17)** | | (1.967) |
| 6 | 0.762 | 0.333 | | | | | -0.778 | | -27.203 | 2.042 |
| | (2.593)*** | (1.388) | | | | | (2.255)** | | (2.372)** | (1.945) |
| 7 | 0.789 | 0.297 | | | | | | -6.707 | -24.659 | 2.037 |
| | (2.667)*** | (1.266) | | | | | | (2.179)** | (2.219)** | (1.94) |
| 8 | 0.743 | 0.313 | | | | | -0.68 | -6.629 | -23.499 | 2.192 |
| | (2.552)** | (1.329) | | | | | (2.043)** | (2.159)** | (2.125)** | (2.063) |
| 9 | 0.838 | 0.289 | -0.002 | 0.142 | | | | | | 2.116 |
| | (2.964)*** | (1.314) | (-0.033) | (1.365) | | | | | | (2.019) |
| 10 | 0.775 | 0.354 | 0.018 | 0.154 | | | -0.803 | | | 2.336 |
| | (2.753)*** | (1.53) | (0.241) | (1.427) | | | (2.352)** | | | (2.207) |
| 11 | 0.806 | 0.316 | 0.016 | 0.148 | | | | -6.797 | | 2.32 |
| | (2.864)*** | (1.383) | (0.215) | (1.381) | | | | (2.157)** | | (2.191) |
| 12 | 0.783 | 0.344 | 0.009 | 0.151 | | | | | -25.017 | 2.296 |
| | (2.78)*** | (1.469) | (0.128) | (1.407) | | | | | (2.222)** | (2.167) |
| 13 | 0.799 | 0.316 | 0.014 | 0.16 | | | -0.667 | -6.653 | | 2.465 |
| | (2.822)*** | (1.39) | (0.187) | (1.487) | | | (1.998)** | (2.146)** | | (2.304) |
| 14 | 0.749 | 0.371 | 0.021 | 0.153 | | | -0.766 | | -26.195 | 2.463 |
| | (2.668)*** | (1.581) | (0.282) | (1.43) | | | (2.206)** | | (2.263)** | (2.302) |
| 15 | 0.792 | 0.322 | 0.028 | 0.161 | | | | -6.652 | -23.074 | 2.428 |
| | (2.792)*** | (1.41) | (0.376) | (1.522) | | | | (2.136)** | (2.026)** | (2.267) |
| 16 | 0.769 | 0.337 | 0.021 | 0.163 | | | -0.641 | -6.539 | -21.489 | 2.582 |
| | (2.718)*** | (1.468) | (0.279) | (1.536) | | | (1.902)* | (2.097)** | (1.898)* | (2.389) |
| 17 | 0.814 | 0.281 | 0.007 | 0.157 | -0.077 | -0.03 | | | | 2.471 |
| | (2.882)*** | (1.285) | (0.105) | (1.537) | (-0.757) | (-0.503) | | | | (2.31) |
| 18 | 0.759 | 0.343 | 0.024 | 0.164 | -0.093 | -0.041 | -0.832 | | | 2.67 |
| | (2.693)*** | (1.498) | (0.341) | (1.55) | (-0.898) | (-0.67) | (2.389)** | | | (2.477) |
| 19 | 0.779 | 0.317 | 0.023 | 0.159 | -0.083 | -0.034 | | -7.049 | | 2.661 |
| | (2.761)*** | (1.389) | (0.32) | (1.509) | (-0.813) | (-0.566) | | (2.191)** | | (2.468) |
| 20 | 0.765 | 0.331 | 0.017 | 0.166 | -0.087 | -0.036 | | | -26.304 | 2.634 |
| | (2.711)*** | (1.429) | (0.248) | (1.57) | (-0.845) | (-0.594) | | | (2.244)** | (2.441) |
| 21 | 0.779 | 0.319 | 0.011 | 0.168 | -0.068 | -0.025 | -0.698 | -6.966 | | 2.769 |
| | (2.75)*** | (1.404) | (0.155) | (1.612) | (-0.672) | (-0.426) | (2.033)** | (2.195)** | | (2.544) |
| 22 | 0.739 | 0.354 | 0.025 | 0.164 | -0.094 | -0.044 | -0.782 | | -26.824 | 2.786 |
| | (2.63)*** | (1.528) | (0.357) | (1.572) | (-0.921) | (-0.734) | (2.219)** | | (2.26)** | (2.561) |
| 23 | 0.772 | 0.319 | 0.031 | 0.173 | -0.076 | -0.027 | | -6.919 | -23.91 | 2.734 |
| | (2.717)*** | (1.402) | (0.442) | (1.673)* | (-0.756) | (-0.46) | | (2.187)** | (2.04)** | (2.509) |
| 24 | 0.754 | 0.335 | 0.019 | 0.175 | -0.071 | -0.026 | -0.675 | -6.987 | -22.619 | 2.879 |
| | (2.67)*** | (1.464) | (0.268) | (1.701)* | (-0.704) | (-0.451) | (1.947)* | (2.188)** | (1.926)* | (2.622) |

### 1.3.2 Shanken t-statistics

| | $\hat{\lambda}_{\text{intercept}}$ | $\hat{\lambda}_{\beta_{MktRF}}$ | $\hat{\lambda}_{\beta_{SMB}}$ | $\hat{\lambda}_{\beta_{HML}}$ | $\hat{\lambda}_{\beta_{RMW}}$ | $\hat{\lambda}_{\beta_{CMA}}$ | $\hat{\lambda}_{\beta_{INDvw}}$ | $\hat{\lambda}_{\beta_{MKTvw}}$ | $\hat{\lambda}_{\beta_{FIRMvw}}$ | $R^2$, $\bar{R}^2$ (in %) |
|---|---|---|---|---|---|---|---|---|---|---|
| | 0.856 | 0.24 | | | | | | | | 1.674 |
| | (2.904)*** | (1.05) | | | | | | | | (1.641) |
| | 0.826 | 0.275 | | | | | -1.8 | | | 1.873 |
| | (2.783)*** | (1.19) | | | | | (2.007)** | | | (1.808) |
| | 0.809 | 0.246 | | | | | | -8.264 | | 1.892 |
| | (2.749)*** | (1.066) | | | | | | (2.162)** | | (1.827) |
| | 0.798 | 0.289 | | | | | | | -6.46 | 1.891 |
| | (2.69)*** | (1.245) | | | | | | | (2.424)** | (1.826) |
| | 0.79 | 0.245 | | | | | -1.554 | -8.083 | | 2.043 |
| | (2.687)*** | (1.074) | | | | | (1.784)* | (2.171)** | | (1.945) |
| | 0.779 | 0.28 | | | | | -1.894 | | -6.447 | 2.038 |
| | (2.648)*** | (1.217) | | | | | (2.12)** | | (2.454)** | (1.941) |
| | 0.801 | 0.25 | | | | | | -8.181 | -5.425 | 2.056 |
| | (2.713)*** | (1.101) | | | | | | (2.198)** | (2.124)** | (1.959) |
| | 0.763 | 0.257 | | | | | -1.6 | -8.321 | -5.565 | 2.171 |
| | (2.606)*** | (1.131) | | | | | (1.854)* | (2.234)** | (2.201)** | (2.042) |
| | 0.838 | 0.289 | -0.002 | 0.142 | | | | | | 2.116 |
| | (2.964)*** | (1.305) | (-0.032) | (1.337) | | | | | | (2.019) |
| 0 | 0.813 | 0.32 | 0.005 | 0.147 | | | -1.76 | | | 2.307 |
| | (2.873)*** | (1.433) | (0.073) | (1.382) | | | (1.983)** | | | (2.178) |
| 1 | 0.839 | 0.286 | 0.012 | 0.15 | | | | -8.267 | | 2.303 |
| | (2.955)*** | (1.278) | (0.16) | (1.374) | | | | (2.121)** | | (2.174) |
| 2 | 0.802 | 0.324 | 0.012 | 0.152 | | | | | -6.369 | 2.317 |
| | (2.834)*** | (1.45) | (0.164) | (1.413) | | | | | (2.375)** | (2.188) |
| 3 | 0.828 | 0.288 | 0.007 | 0.161 | | | -1.557 | -8.332 | | 2.456 |
| | (2.906)*** | (1.303) | (0.094) | (1.53) | | | (1.795)* | (2.186)** | | (2.295) |
| 4 | 0.787 | 0.301 | 0.034 | 0.171 | | | -1.908 | | -6.601 | 2.463 |
| | (2.79)*** | (1.361) | (0.454) | (1.554) | | | (2.129)** | | (2.462)** | (2.302) |
| 5 | 0.837 | 0.287 | 0.006 | 0.153 | | | | -8.31 | -5.27 | 2.462 |
| | (2.939)*** | (1.307) | (0.087) | (1.463) | | | | (2.188)** | (2.048)** | (2.301) |
| 6 | 0.814 | 0.277 | 0.03 | 0.174 | | | -1.605 | -8.446 | -5.557 | 2.59 |
| | (2.869)*** | (1.269) | (0.399) | (1.638) | | | (1.852)* | (2.222)** | (2.154)** | (2.396) |
| 7 | 0.814 | 0.281 | 0.007 | 0.157 | -0.077 | -0.03 | | | | 2.471 |
| | (2.882)*** | (1.277) | (0.102) | (1.509) | (-0.725) | (-0.471) | | | | (2.31) |
| 8 | 0.788 | 0.317 | 0.016 | 0.161 | -0.091 | -0.032 | -1.963 | | | 2.65 |
| | (2.785)*** | (1.419) | (0.231) | (1.53) | (-0.848) | (-0.51) | (2.122)** | | | (2.457) |
| 9 | 0.812 | 0.29 | 0.017 | 0.161 | -0.077 | -0.024 | | -8.44 | | 2.642 |
| | (2.854)*** | (1.285) | (0.237) | (1.519) | (-0.724) | (-0.39) | | (2.125)** | | (2.449) |
| 0 | 0.78 | 0.322 | 0.018 | 0.165 | -0.09 | -0.033 | | | -6.514 | 2.658 |
| | (2.754)*** | (1.434) | (0.248) | (1.557) | (-0.85) | (-0.514) | | | (2.365)** | (2.465) |
| 1 | 0.812 | 0.29 | 0.006 | 0.168 | -0.064 | -0.011 | -1.699 | -8.506 | | 2.77 |
| | (2.848)*** | (1.302) | (0.082) | (1.651)* | (-0.621) | (-0.182) | (1.9)* | (2.193)** | | (2.545) |
| 2 | 0.776 | 0.31 | 0.03 | 0.171 | -0.081 | -0.036 | -2.025 | | -6.793 | 2.763 |
| | (2.742)*** | (1.395) | (0.411) | (1.601) | (-0.777) | (-0.548) | (2.2)** | | (2.483)** | (2.538) |
| 3 | 0.819 | 0.284 | 0.007 | 0.165 | -0.063 | -0.017 | | -8.333 | -5.357 | 2.779 |
| | (2.868)*** | (1.287) | (0.095) | (1.615) | (-0.614) | (-0.283) | | (2.168)** | (2.036)** | (2.554) |
| 4 | 0.808 | 0.283 | 0.021 | 0.174 | -0.058 | -0.014 | -1.684 | -8.47 | -5.656 | 2.886 |
| | (2.835)*** | (1.284) | (0.29) | (1.695)* | (-0.578) | (-0.24) | (1.9)* | (2.206)** | (2.155)** | (2.629) |

| # | $\hat{\lambda}_{\text{intercept}}$ | $\hat{\lambda}_{\beta_{MktRF}}$ | $\hat{\lambda}_{\beta_{SMB}}$ | $\hat{\lambda}_{\beta_{HML}}$ | $\hat{\lambda}_{\beta_{RMW}}$ | $\hat{\lambda}_{\beta_{CMA}}$ | $\hat{\lambda}_{\beta_{INDew}}$ | $\hat{\lambda}_{\beta_{MKTew}}$ | $\hat{\lambda}_{\beta_{FIRMew}}$ | $R^2$, $\bar{R}^2$ (in %) |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.856 | 0.24 | | | | | | | | 1.674 |
| | (2.904)*** | (1.05) | | | | | | | | (1.641) |
| 2 | 0.784 | 0.319 | | | | | -0.827 | | | 1.9 |
| | (2.652)*** | (1.324) | | | | | (2.377)** | | | (1.836) |
| 3 | 0.797 | 0.274 | | | | | | -6.7 | | 1.905 |
| | (2.719)*** | (1.157) | | | | | | (2.135)** | | (1.841) |
| 4 | 0.785 | 0.308 | | | | | | | -25.904 | 1.864 |
| | (2.655)*** | (1.275) | | | | | | | (2.369)** | (1.799) |
| 5 | 0.776 | 0.285 | | | | | -0.695 | -6.572 | | 2.064 |
| | (2.651)*** | (1.204) | | | | | (2.081)** | (2.147)** | | (1.967) |
| 6 | 0.762 | 0.333 | | | | | -0.778 | | -27.203 | 2.042 |
| | (2.593)*** | (1.382) | | | | | (2.214)** | | (2.365)** | (1.945) |
| 7 | 0.789 | 0.297 | | | | | | -6.707 | -24.659 | 2.037 |
| | (2.667)*** | (1.259) | | | | | | (2.155)** | (2.214)** | (1.94) |
| 8 | 0.743 | 0.313 | | | | | -0.68 | -6.629 | -23.499 | 2.192 |
| | (2.552)** | (1.323) | | | | | (2.011)** | (2.136)** | (2.12)** | (2.063) |
| 9 | 0.838 | 0.289 | -0.002 | 0.142 | | | | | | 2.116 |
| | (2.964)*** | (1.305) | (-0.032) | (1.337) | | | | | | (2.019) |
| 10 | 0.775 | 0.354 | 0.018 | 0.154 | | | -0.803 | | | 2.336 |
| | (2.753)*** | (1.524) | (0.235) | (1.403) | | | (2.307)** | | | (2.207) |
| 11 | 0.806 | 0.316 | 0.016 | 0.148 | | | | -6.797 | | 2.32 |
| | (2.864)*** | (1.376) | (0.209) | (1.356) | | | | (2.133)** | | (2.191) |
| 12 | 0.783 | 0.344 | 0.009 | 0.151 | | | | | -25.017 | 2.296 |
| | (2.78)*** | (1.462) | (0.125) | (1.383) | | | | | (2.216)** | (2.167) |
| 13 | 0.799 | 0.316 | 0.014 | 0.16 | | | -0.667 | -6.653 | | 2.465 |
| | (2.822)*** | (1.383) | (0.182) | (1.461) | | | (1.965)* | (2.123)** | | (2.304) |
| 14 | 0.749 | 0.371 | 0.021 | 0.153 | | | -0.766 | | -26.195 | 2.463 |
| | (2.668)*** | (1.576) | (0.276) | (1.408) | | | (2.167)** | | (2.256)** | (2.302) |
| 15 | 0.792 | 0.322 | 0.028 | 0.161 | | | | -6.652 | -23.074 | 2.428 |
| | (2.792)*** | (1.403) | (0.367) | (1.496) | | | | (2.113)** | (2.021)** | (2.267) |
| 16 | 0.769 | 0.337 | 0.021 | 0.163 | | | -0.641 | -6.539 | -21.489 | 2.582 |
| | (2.718)*** | (1.461) | (0.272) | (1.512) | | | (1.873)* | (2.076)** | (1.895)* | (2.389) |
| 17 | 0.814 | 0.281 | 0.007 | 0.157 | -0.077 | -0.03 | | | | 2.471 |
| | (2.882)*** | (1.277) | (0.102) | (1.509) | (-0.725) | (-0.471) | | | | (2.31) |
| 18 | 0.759 | 0.343 | 0.024 | 0.164 | -0.093 | -0.041 | -0.832 | | | 2.67 |
| | (2.693)*** | (1.492) | (0.333) | (1.526) | (-0.863) | (-0.632) | (2.343)** | | | (2.477) |
| 19 | 0.779 | 0.317 | 0.023 | 0.159 | -0.083 | -0.034 | | -7.049 | | 2.661 |
| | (2.761)*** | (1.383) | (0.313) | (1.484) | (-0.78) | (-0.533) | | (2.165)** | | (2.468) |
| 20 | 0.765 | 0.331 | 0.017 | 0.166 | -0.087 | -0.036 | | | -26.304 | 2.634 |
| | (2.711)*** | (1.423) | (0.242) | (1.546) | (-0.812) | (-0.56) | | | (2.237)** | (2.441) |
| 21 | 0.779 | 0.319 | 0.011 | 0.168 | -0.068 | -0.025 | -0.698 | -6.966 | | 2.769 |
| | (2.75)*** | (1.397) | (0.152) | (1.586) | (-0.647) | (-0.402) | (1.998)** | (2.169)** | | (2.544) |
| 22 | 0.739 | 0.354 | 0.025 | 0.164 | -0.094 | -0.044 | -0.782 | | -26.824 | 2.786 |
| | (2.63)*** | (1.523) | (0.349) | (1.55) | (-0.887) | (-0.694) | (2.179)** | | (2.253)** | (2.561) |
| 23 | 0.772 | 0.319 | 0.031 | 0.173 | -0.076 | -0.027 | | -6.919 | -23.91 | 2.734 |
| | (2.717)*** | (1.395) | (0.432) | (1.647) | (-0.727) | (-0.434) | | (2.162)** | (2.035)** | (2.509) |
| 24 | 0.754 | 0.335 | 0.019 | 0.175 | -0.071 | -0.026 | -0.675 | -6.987 | -22.619 | 2.879 |
| | (2.67)*** | (1.458) | (0.262) | (1.677)* | (-0.679) | (-0.426) | (1.916)* | (2.163)** | (1.922)* | (2.622) |

### 1.3.3 Newey-West t-statistics

| # | $\hat{\lambda}_{\text{intercept}}$ | $\hat{\lambda}_{\beta_{MktRF}}$ | $\hat{\lambda}_{\beta_{SMB}}$ | $\hat{\lambda}_{\beta_{HML}}$ | $\hat{\lambda}_{\beta_{RMW}}$ | $\hat{\lambda}_{\beta_{CMA}}$ | $\hat{\lambda}_{\beta_{INDvw}}$ | $\hat{\lambda}_{\beta_{MKTvw}}$ | $\hat{\lambda}_{\beta_{FIRMvw}}$ | $R^2$, $\bar{R}^2$ (in %) |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.856 | 0.24 | | | | | | | | 1.674 |
| | (1.995)** | (0.875) | | | | | | | | (1.641) |
| 2 | 0.826 | 0.275 | | | | | -1.8 | | | 1.873 |
| | (1.919)* | (0.969) | | | | | (-1.38) | | | (1.808) |
| 3 | 0.809 | 0.246 | | | | | | -8.264 | | 1.892 |
| | (1.899)* | (0.886) | | | | | | (-1.568) | | (1.827) |
| 4 | 0.798 | 0.289 | | | | | | | -6.46 | 1.891 |
| | (1.858)* | (1.009) | | | | | | | (1.654)* | (1.826) |
| 5 | 0.79 | 0.245 | | | | | -1.554 | -8.083 | | 2.043 |
| | (1.863)* | (0.893) | | | | | (-1.27) | (-1.594) | | (1.945) |
| 6 | 0.779 | 0.28 | | | | | -1.894 | | -6.447 | 2.038 |
| | (1.834)* | (0.99) | | | | | (-1.439) | | (1.65)* | (1.941) |
| 7 | 0.801 | 0.25 | | | | | | -8.181 | -5.425 | 2.056 |
| | (1.877)* | (0.914) | | | | | | (-1.619) | (-1.511) | (1.959) |
| 8 | 0.763 | 0.257 | | | | | -1.6 | -8.321 | -5.565 | 2.171 |
| | (1.81)* | (0.934) | | | | | (-1.309) | (-1.648) | (-1.547) | (2.042) |
| 9 | 0.838 | 0.289 | -0.002 | 0.142 | | | | | | 2.116 |
| | (2.031)** | (1.076) | (-0.028) | (1.246) | | | | | | (2.019) |
| 10 | 0.813 | 0.32 | 0.005 | 0.147 | | | -1.76 | | | 2.307 |
| | (1.98)** | (1.164) | (0.065) | (1.255) | | | (-1.351) | | | (2.178) |
| 11 | 0.839 | 0.286 | 0.012 | 0.15 | | | | -8.267 | | 2.303 |
| | (2.041)** | (1.058) | (0.142) | (1.272) | | | | (-1.55) | | (2.174) |
| 12 | 0.802 | 0.324 | 0.012 | 0.152 | | | | | -6.369 | 2.317 |
| | (1.956)* | (1.179) | (0.145) | (1.285) | | | | | (-1.623) | (2.188) |
| 13 | 0.828 | 0.288 | 0.007 | 0.161 | | | -1.557 | -8.332 | | 2.456 |
| | (2.011)** | (1.082) | (0.084) | (1.392) | | | (-1.273) | (-1.615) | | (2.295) |
| 14 | 0.787 | 0.301 | 0.034 | 0.171 | | | -1.908 | | -6.601 | 2.463 |
| | (1.924)* | (1.112) | (0.395) | (1.386) | | | (-1.439) | | (1.654)* | (2.302) |
| 15 | 0.837 | 0.287 | 0.006 | 0.153 | | | | -8.31 | -5.27 | 2.462 |
| | (2.037)** | (1.09) | (0.077) | (1.358) | | | | (-1.633) | (-1.467) | (2.301) |
| 16 | 0.814 | 0.277 | 0.03 | 0.174 | | | -1.605 | -8.446 | -5.557 | 2.59 |
| | (1.986)** | (1.061) | (0.342) | (1.47) | | | (-1.308) | (-1.642) | (-1.513) | (2.396) |
| 17 | 0.814 | 0.281 | 0.007 | 0.157 | -0.077 | -0.03 | | | | 2.471 |
| | (1.971)** | (1.061) | (0.096) | (1.397) | (-0.597) | (-0.447) | | | | (2.31) |
| 18 | 0.788 | 0.317 | 0.016 | 0.161 | -0.091 | -0.032 | -1.963 | | | 2.65 |
| | (1.905)* | (1.159) | (0.215) | (1.386) | (-0.686) | (-0.48) | (-1.438) | | | (2.457) |
| 19 | 0.812 | 0.29 | 0.017 | 0.161 | -0.077 | -0.024 | | -8.44 | | 2.642 |
| | (1.956)* | (1.071) | (0.222) | (1.403) | (-0.599) | (-0.37) | | (-1.544) | | (2.449) |
| 20 | 0.78 | 0.322 | 0.018 | 0.165 | -0.09 | -0.033 | | | -6.514 | 2.658 |
| | (1.886)* | (1.173) | (0.229) | (1.406) | (-0.691) | (-0.487) | | | (-1.612) | (2.465) |
| 21 | 0.812 | 0.29 | 0.006 | 0.168 | -0.064 | -0.011 | -1.699 | -8.506 | | 2.77 |
| | (1.955)* | (1.083) | (0.076) | (1.521) | (-0.506) | (-0.172) | (-1.337) | (-1.609) | | (2.545) |
| 22 | 0.776 | 0.31 | 0.03 | 0.171 | -0.081 | -0.036 | -2.025 | | -6.793 | 2.763 |
| | (1.876)* | (1.139) | (0.375) | (1.431) | (-0.631) | (-0.521) | (-1.479) | | (1.662)* | (2.538) |
| 23 | 0.819 | 0.284 | 0.007 | 0.165 | -0.063 | -0.017 | | -8.333 | -5.357 | 2.779 |
| | (1.972)** | (1.081) | (0.087) | (1.501) | (-0.501) | (-0.271) | | (-1.629) | (-1.464) | (2.554) |
| 24 | 0.808 | 0.283 | 0.021 | 0.174 | -0.058 | -0.014 | -1.684 | -8.47 | -5.656 | 2.886 |
| | (1.947)* | (1.079) | (0.262) | (1.543) | (-0.474) | (-0.23) | (-1.341) | (-1.635) | (-1.517) | (2.629) |

| # | $\hat{\lambda}_{\text{intercept}}$ | $\hat{\lambda}_{\beta_{MktRF}}$ | $\hat{\lambda}_{\beta_{SMB}}$ | $\hat{\lambda}_{\beta_{HML}}$ | $\hat{\lambda}_{\beta_{RMW}}$ | $\hat{\lambda}_{\beta_{CMA}}$ | $\hat{\lambda}_{\beta_{INDew}}$ | $\hat{\lambda}_{\beta_{MKTew}}$ | $\hat{\lambda}_{\beta_{FIRMew}}$ | $R^2$, $\bar{R}^2$ (in %) |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.856 | 0.24 | | | | | | | | 1.674 |
| | (1.995)** | (0.875) | | | | | | | | (1.641) |
| 2 | 0.784 | 0.319 | | | | | -0.827 | | | 1.9 |
| | (1.822)* | (1.066) | | | | | (-1.641) | | | (1.836) |
| 3 | 0.797 | 0.274 | | | | | | -6.7 | | 1.905 |
| | (1.874)* | (0.953) | | | | | | (-1.553) | | (1.841) |
| 4 | 0.785 | 0.308 | | | | | | | -25.904 | 1.864 |
| | (1.822)* | (1.038) | | | | | | | (1.672)* | (1.799) |
| 5 | 0.776 | 0.285 | | | | | -0.695 | -6.572 | | 2.064 |
| | (1.821)* | (0.984) | | | | | (-1.512) | (-1.6) | | (1.967) |
| 6 | 0.762 | 0.333 | | | | | -0.778 | | -27.203 | 2.042 |
| | (1.771)* | (1.114) | | | | | (-1.534) | | (1.649)* | (1.945) |
| 7 | 0.789 | 0.297 | | | | | | -6.707 | -24.659 | 2.037 |
| | (1.835)* | (1.032) | | | | | | (-1.571) | (-1.614) | (1.94) |
| 8 | 0.743 | 0.313 | | | | | -0.68 | -6.629 | -23.499 | 2.192 |
| | (1.746)* | (1.081) | | | | | (-1.446) | (-1.57) | (-1.558) | (2.063) |
| 9 | 0.838 | 0.289 | -0.002 | 0.142 | | | | | | 2.116 |
| | (2.031)** | (1.076) | (-0.028) | (1.246) | | | | | | (2.019) |
| 10 | 0.775 | 0.354 | 0.018 | 0.154 | | | -0.803 | | | 2.336 |
| | (1.888)* | (1.222) | (0.206) | (1.27) | | | (-1.591) | | | (2.207) |
| 11 | 0.806 | 0.316 | 0.016 | 0.148 | | | | -6.797 | | 2.32 |
| | (1.976)** | (1.122) | (0.182) | (1.256) | | | | (-1.56) | | (2.191) |
| 12 | 0.783 | 0.344 | 0.009 | 0.151 | | | | | -25.017 | 2.296 |
| | (1.903)* | (1.178) | (0.111) | (1.276) | | | | | (-1.567) | (2.167) |
| 13 | 0.799 | 0.316 | 0.014 | 0.16 | | | -0.667 | -6.653 | | 2.465 |
| | (1.939)* | (1.133) | (0.157) | (1.339) | | | (-1.446) | (-1.605) | | (2.304) |
| 14 | 0.749 | 0.371 | 0.021 | 0.153 | | | -0.766 | | -26.195 | 2.463 |
| | (1.823)* | (1.26) | (0.239) | (1.282) | | | (-1.5) | | (-1.58) | (2.302) |
| 15 | 0.792 | 0.322 | 0.028 | 0.161 | | | | -6.652 | -23.074 | 2.428 |
| | (1.918)* | (1.144) | (0.31) | (1.399) | | | | (-1.552) | (-1.487) | (2.267) |
| 16 | 0.769 | 0.337 | 0.021 | 0.163 | | | -0.641 | -6.539 | -21.489 | 2.582 |
| | (1.86)* | (1.19) | (0.231) | (1.394) | | | (-1.374) | (-1.563) | (-1.437) | (2.389) |
| 17 | 0.814 | 0.281 | 0.007 | 0.157 | -0.077 | -0.03 | | | | 2.471 |
| | (1.971)** | (1.061) | (0.096) | (1.397) | (-0.597) | (-0.447) | | | | (2.31) |
| 18 | 0.759 | 0.343 | 0.024 | 0.164 | -0.093 | -0.041 | -0.832 | | | 2.67 |
| | (1.839)* | (1.208) | (0.302) | (1.379) | (-0.698) | (-0.589) | (-1.616) | | | (2.477) |
| 19 | 0.779 | 0.317 | 0.023 | 0.159 | -0.083 | -0.034 | | -7.049 | | 2.661 |
| | (1.893)* | (1.134) | (0.286) | (1.365) | (-0.639) | (-0.503) | | (-1.562) | | (2.468) |
| 20 | 0.765 | 0.331 | 0.017 | 0.166 | -0.087 | -0.036 | | | -26.304 | 2.634 |
| | (1.848)* | (1.157) | (0.222) | (1.418) | (-0.662) | (-0.526) | | | (-1.574) | (2.441) |
| 21 | 0.779 | 0.319 | 0.011 | 0.168 | -0.068 | -0.025 | -0.698 | -6.966 | | 2.769 |
| | (1.88)* | (1.144) | (0.137) | (1.448) | (-0.527) | (-0.379) | (-1.443) | (-1.597) | | (2.544) |
| 22 | 0.739 | 0.354 | 0.025 | 0.164 | -0.094 | -0.044 | -0.782 | | -26.824 | 2.786 |
| | (1.792)* | (1.228) | (0.317) | (1.416) | (-0.712) | (-0.657) | (-1.512) | | (-1.576) | (2.561) |
| 23 | 0.772 | 0.319 | 0.031 | 0.173 | -0.076 | -0.027 | | -6.919 | -23.91 | 2.734 |
| | (1.857)* | (1.143) | (0.384) | (1.535) | (-0.595) | (-0.416) | | (-1.575) | (-1.482) | (2.509) |
| 24 | 0.754 | 0.335 | 0.019 | 0.175 | -0.071 | -0.026 | -0.675 | -6.987 | -22.619 | 2.879 |
| | (1.821)* | (1.185) | (0.234) | (1.543) | (-0.546) | (-0.405) | (-1.372) | (-1.583) | (-1.402) | (2.622) |

### 1.3.4 Newey-West t-statistics, dataset is same as controls

| # | $\hat{\lambda}_{\text{intercept}}$ | $\hat{\lambda}_{\beta_{MktRF}}$ | $\hat{\lambda}_{\beta_{SMB}}$ | $\hat{\lambda}_{\beta_{HML}}$ | $\hat{\lambda}_{\beta_{RMW}}$ | $\hat{\lambda}_{\beta_{CMA}}$ | $\hat{\lambda}_{\beta_{INDvw}}$ | $\hat{\lambda}_{\beta_{MKTvw}}$ | $\hat{\lambda}_{\beta_{FIRMvw}}$ | $R^2$, $\bar{R}^2$ (in %) |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.856 | 0.24 | | | | | | | | 1.674 |
| | (1.995)** | (0.875) | | | | | | | | (1.641) |
| 2 | 0.826 | 0.275 | | | | | -1.8 | | | 1.873 |
| | (1.919)* | (0.969) | | | | | (-1.38) | | | (1.808) |
| 3 | 0.809 | 0.246 | | | | | | -8.264 | | 1.892 |
| | (1.899)* | (0.886) | | | | | | (-1.568) | | (1.827) |
| 4 | 0.798 | 0.289 | | | | | | | -6.46 | 1.891 |
| | (1.858)* | (1.009) | | | | | | | (1.654)* | (1.826) |
| 5 | 0.79 | 0.245 | | | | | -1.554 | -8.083 | | 2.043 |
| | (1.863)* | (0.893) | | | | | (-1.27) | (-1.594) | | (1.945) |
| 6 | 0.779 | 0.28 | | | | | -1.894 | | -6.447 | 2.038 |
| | (1.834)* | (0.99) | | | | | (-1.439) | | (1.65)* | (1.941) |
| 7 | 0.801 | 0.25 | | | | | | -8.181 | -5.425 | 2.056 |
| | (1.877)* | (0.914) | | | | | | (-1.619) | (-1.511) | (1.959) |
| 8 | 0.763 | 0.257 | | | | | -1.6 | -8.321 | -5.565 | 2.171 |
| | (1.81)* | (0.934) | | | | | (-1.309) | (-1.648) | (-1.547) | (2.042) |
| 9 | 0.838 | 0.289 | -0.002 | 0.142 | | | | | | 2.116 |
| | (2.031)** | (1.076) | (-0.028) | (1.246) | | | | | | (2.019) |
| 10 | 0.813 | 0.32 | 0.005 | 0.147 | | | -1.76 | | | 2.307 |
| | (1.98)** | (1.164) | (0.065) | (1.255) | | | (-1.351) | | | (2.178) |
| 11 | 0.839 | 0.286 | 0.012 | 0.15 | | | | -8.267 | | 2.303 |
| | (2.041)** | (1.058) | (0.142) | (1.272) | | | | (-1.55) | | (2.174) |
| 12 | 0.802 | 0.324 | 0.012 | 0.152 | | | | | -6.369 | 2.317 |
| | (1.956)* | (1.179) | (0.145) | (1.285) | | | | | (-1.623) | (2.188) |
| 13 | 0.828 | 0.288 | 0.007 | 0.161 | | | -1.557 | -8.332 | | 2.456 |
| | (2.011)** | (1.082) | (0.084) | (1.392) | | | (-1.273) | (-1.615) | | (2.295) |
| 14 | 0.787 | 0.301 | 0.034 | 0.171 | | | -1.908 | | -6.601 | 2.463 |
| | (1.924)* | (1.112) | (0.395) | (1.386) | | | (-1.439) | | (1.654)* | (2.302) |
| 15 | 0.837 | 0.287 | 0.006 | 0.153 | | | | -8.31 | -5.27 | 2.462 |
| | (2.037)** | (1.09) | (0.077) | (1.358) | | | | (-1.633) | (-1.467) | (2.301) |
| 16 | 0.814 | 0.277 | 0.03 | 0.174 | | | -1.605 | -8.446 | -5.557 | 2.59 |
| | (1.986)** | (1.061) | (0.342) | (1.47) | | | (-1.308) | (-1.642) | (-1.513) | (2.396) |
| 17 | 0.814 | 0.281 | 0.007 | 0.157 | -0.077 | -0.03 | | | | 2.471 |
| | (1.971)** | (1.061) | (0.096) | (1.397) | (-0.597) | (-0.447) | | | | (2.31) |
| 18 | 0.788 | 0.317 | 0.016 | 0.161 | -0.091 | -0.032 | -1.963 | | | 2.65 |
| | (1.905)* | (1.159) | (0.215) | (1.386) | (-0.686) | (-0.48) | (-1.438) | | | (2.457) |
| 19 | 0.812 | 0.29 | 0.017 | 0.161 | -0.077 | -0.024 | | -8.44 | | 2.642 |
| | (1.956)* | (1.071) | (0.222) | (1.403) | (-0.599) | (-0.37) | | (-1.544) | | (2.449) |
| 20 | 0.78 | 0.322 | 0.018 | 0.165 | -0.09 | -0.033 | | | -6.514 | 2.658 |
| | (1.886)* | (1.173) | (0.229) | (1.406) | (-0.691) | (-0.487) | | | (-1.612) | (2.465) |
| 21 | 0.812 | 0.29 | 0.006 | 0.168 | -0.064 | -0.011 | -1.699 | -8.506 | | 2.77 |
| | (1.955)* | (1.083) | (0.076) | (1.521) | (-0.506) | (-0.172) | (-1.337) | (-1.609) | | (2.545) |
| 22 | 0.776 | 0.31 | 0.03 | 0.171 | -0.081 | -0.036 | -2.025 | | -6.793 | 2.763 |
| | (1.876)* | (1.139) | (0.375) | (1.431) | (-0.631) | (-0.521) | (-1.479) | | (1.662)* | (2.538) |
| 23 | 0.819 | 0.284 | 0.007 | 0.165 | -0.063 | -0.017 | | -8.333 | -5.357 | 2.779 |
| | (1.972)** | (1.081) | (0.087) | (1.501) | (-0.501) | (-0.271) | | (-1.629) | (-1.464) | (2.554) |
| 24 | 0.808 | 0.283 | 0.021 | 0.174 | -0.058 | -0.014 | -1.684 | -8.47 | -5.656 | 2.886 |
| | (1.947)* | (1.079) | (0.262) | (1.543) | (-0.474) | (-0.23) | (-1.341) | (-1.635) | (-1.517) | (2.629) |

| # | $\hat{\lambda}_{\text{intercept}}$ | $\hat{\lambda}_{\beta_{MktRF}}$ | $\hat{\lambda}_{\beta_{SMB}}$ | $\hat{\lambda}_{\beta_{HML}}$ | $\hat{\lambda}_{\beta_{RMW}}$ | $\hat{\lambda}_{\beta_{CMA}}$ | $\hat{\lambda}_{\beta_{INDew}}$ | $\hat{\lambda}_{\beta_{MKTew}}$ | $\hat{\lambda}_{\beta_{FIRMew}}$ | $R^2$, $\bar{R}^2$ (in %) |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.856 | 0.24 | | | | | | | | 1.674 |
| | (1.995)** | (0.875) | | | | | | | | (1.641) |
| 2 | 0.784 | 0.319 | | | | | -0.827 | | | 1.9 |
| | (1.822)* | (1.066) | | | | | (-1.641) | | | (1.836) |
| 3 | 0.797 | 0.274 | | | | | | -6.7 | | 1.905 |
| | (1.874)* | (0.953) | | | | | | (-1.553) | | (1.841) |
| 4 | 0.785 | 0.308 | | | | | | | -25.904 | 1.864 |
| | (1.822)* | (1.038) | | | | | | | (1.672)* | (1.799) |
| 5 | 0.776 | 0.285 | | | | | -0.695 | -6.572 | | 2.064 |
| | (1.821)* | (0.984) | | | | | (-1.512) | (-1.6) | | (1.967) |
| 6 | 0.762 | 0.333 | | | | | -0.778 | | -27.203 | 2.042 |
| | (1.771)* | (1.114) | | | | | (-1.534) | | (1.649)* | (1.945) |
| 7 | 0.789 | 0.297 | | | | | | -6.707 | -24.659 | 2.037 |
| | (1.835)* | (1.032) | | | | | | (-1.571) | (-1.614) | (1.94) |
| 8 | 0.743 | 0.313 | | | | | -0.68 | -6.629 | -23.499 | 2.192 |
| | (1.746)* | (1.081) | | | | | (-1.446) | (-1.57) | (-1.558) | (2.063) |
| 9 | 0.838 | 0.289 | -0.002 | 0.142 | | | | | | 2.116 |
| | (2.031)** | (1.076) | (-0.028) | (1.246) | | | | | | (2.019) |
| 10 | 0.775 | 0.354 | 0.018 | 0.154 | | | -0.803 | | | 2.336 |
| | (1.888)* | (1.222) | (0.206) | (1.27) | | | (-1.591) | | | (2.207) |
| 11 | 0.806 | 0.316 | 0.016 | 0.148 | | | | -6.797 | | 2.32 |
| | (1.976)** | (1.122) | (0.182) | (1.256) | | | | (-1.56) | | (2.191) |
| 12 | 0.783 | 0.344 | 0.009 | 0.151 | | | | | -25.017 | 2.296 |
| | (1.903)* | (1.178) | (0.111) | (1.276) | | | | | (-1.567) | (2.167) |
| 13 | 0.799 | 0.316 | 0.014 | 0.16 | | | -0.667 | -6.653 | | 2.465 |
| | (1.939)* | (1.133) | (0.157) | (1.339) | | | (-1.446) | (-1.605) | | (2.304) |
| 14 | 0.749 | 0.371 | 0.021 | 0.153 | | | -0.766 | | -26.195 | 2.463 |
| | (1.823)* | (1.26) | (0.239) | (1.282) | | | (-1.5) | | (-1.58) | (2.302) |
| 15 | 0.792 | 0.322 | 0.028 | 0.161 | | | | -6.652 | -23.074 | 2.428 |
| | (1.918)* | (1.144) | (0.31) | (1.399) | | | | (-1.552) | (-1.487) | (2.267) |
| 16 | 0.769 | 0.337 | 0.021 | 0.163 | | | -0.641 | -6.539 | -21.489 | 2.582 |
| | (1.86)* | (1.19) | (0.231) | (1.394) | | | (-1.374) | (-1.563) | (-1.437) | (2.389) |
| 17 | 0.814 | 0.281 | 0.007 | 0.157 | -0.077 | -0.03 | | | | 2.471 |
| | (1.971)** | (1.061) | (0.096) | (1.397) | (-0.597) | (-0.447) | | | | (2.31) |
| 18 | 0.759 | 0.343 | 0.024 | 0.164 | -0.093 | -0.041 | -0.832 | | | 2.67 |
| | (1.839)* | (1.208) | (0.302) | (1.379) | (-0.698) | (-0.589) | (-1.616) | | | (2.477) |
| 19 | 0.779 | 0.317 | 0.023 | 0.159 | -0.083 | -0.034 | | -7.049 | | 2.661 |
| | (1.893)* | (1.134) | (0.286) | (1.365) | (-0.639) | (-0.503) | | (-1.562) | | (2.468) |
| 20 | 0.765 | 0.331 | 0.017 | 0.166 | -0.087 | -0.036 | | | -26.304 | 2.634 |
| | (1.848)* | (1.157) | (0.222) | (1.418) | (-0.662) | (-0.526) | | | (-1.574) | (2.441) |
| 21 | 0.779 | 0.319 | 0.011 | 0.168 | -0.068 | -0.025 | -0.698 | -6.966 | | 2.769 |
| | (1.88)* | (1.144) | (0.137) | (1.448) | (-0.527) | (-0.379) | (-1.443) | (-1.597) | | (2.544) |
| 22 | 0.739 | 0.354 | 0.025 | 0.164 | -0.094 | -0.044 | -0.782 | | -26.824 | 2.786 |
| | (1.792)* | (1.228) | (0.317) | (1.416) | (-0.712) | (-0.657) | (-1.512) | | (-1.576) | (2.561) |
| 23 | 0.772 | 0.319 | 0.031 | 0.173 | -0.076 | -0.027 | | -6.919 | -23.91 | 2.734 |
| | (1.857)* | (1.143) | (0.384) | (1.535) | (-0.595) | (-0.416) | | (-1.575) | (-1.482) | (2.509) |
| 24 | 0.754 | 0.335 | 0.019 | 0.175 | -0.071 | -0.026 | -0.675 | -6.987 | -22.619 | 2.879 |
| | (1.821)* | (1.185) | (0.234) | (1.543) | (-0.546) | (-0.405) | (-1.372) | (-1.583) | (-1.402) | (2.622) |

### 1.3.5 Newey-West t-statistics, controls

| # | $\hat{\lambda}_{\text{intercept}}$ | $\hat{\lambda}_{\beta_{MktRF}}$ | $\hat{\lambda}_{\beta_{SMB}}$ | $\hat{\lambda}_{\beta_{HML}}$ | $\hat{\lambda}_{\beta_{RMW}}$ | $\hat{\lambda}_{\beta_{CMA}}$ | $\hat{\lambda}_{\beta_{INDvw}}$ | $\hat{\lambda}_{\beta_{MKTvw}}$ | $\hat{\lambda}_{\beta_{FIRMvw}}$ | $\hat{\lambda}_{\text{ln.BM}}$ | $\hat{\lambda}_{\text{ln.ME}}$ | $R^2$, $\bar{R}^2$ (in %) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.856 | 0.24 | | | | | | | | | | 1.674 |
| | (1.995)** | (0.875) | | | | | | | | | | (1.641) |
| 2 | 1.496 | 0.271 | | | | | -1.631 | | | | -0.121 | 2.489 |
| | (2.166)** | (0.95) | | | | | (-1.231) | | | | (1.968)** | (2.393) |
| 3 | 0.968 | 0.293 | | | | | -1.778 | | | 0.32 | | 2.209 |
| | (2.098)** | (1.057) | | | | | (-1.356) | | | (2.889)*** | | (2.112) |
| 4 | 1.381 | 0.285 | | | | | -1.668 | | | 0.243 | -0.081 | 2.771 |
| | (2.038)** | (1.029) | | | | | (-1.265) | | | (2.461)** | (-1.384) | (2.642) |
| 5 | 1.342 | 0.256 | | | | | | -7.588 | | 0.237 | -0.075 | 2.776 |
| | (2.013)** | (0.953) | | | | | | (-1.45) | | (2.402)** | (-1.322) | (2.647) |
| 6 | 1.345 | 0.292 | | | | | | | -5.2 | 0.245 | -0.078 | 2.786 |
| | (1.992)** | (1.051) | | | | | | | (-1.316) | (2.459)** | (-1.348) | (2.657) |
| 7 | 1.333 | 0.263 | | | | | -1.444 | -7.476 | | 0.245 | -0.075 | 2.906 |
| | (2.009)** | (0.981) | | | | | (-1.168) | (-1.481) | | (2.492)** | (-1.337) | (2.746) |
| 8 | 1.332 | 0.279 | | | | | -1.626 | | -5.19 | 0.246 | -0.075 | 2.899 |
| | (1.989)** | (1.007) | | | | | (-1.221) | | (-1.316) | (2.478)** | (-1.306) | (2.739) |
| 9 | 1.343 | 0.26 | | | | | | -7.527 | -4.345 | 0.247 | -0.076 | 2.914 |
| | (2.007)** | (0.972) | | | | | | (-1.497) | (-1.192) | (2.528)** | (-1.342) | (2.754) |
| 10 | 1.321 | 0.261 | | | | | -1.379 | -7.566 | -4.461 | 0.248 | -0.074 | 3.017 |
| | (1.991)** | (0.973) | | | | | (-1.113) | (-1.508) | (-1.228) | (2.502)** | (-1.315) | (2.825) |
| 11 | 0.838 | 0.289 | -0.002 | 0.142 | | | | | | | | 2.116 |
| | (2.031)** | (1.076) | (-0.028) | (1.246) | | | | | | | | (2.019) |
| 12 | 1.607 | 0.355 | -0.057 | 0.168 | | | -1.632 | | | | -0.142 | 2.913 |
| | (2.407)** | (1.283) | (-0.751) | (1.449) | | | (-1.22) | | | | (2.296)** | (2.753) |
| 13 | 0.972 | 0.323 | -0.005 | 0.097 | | | -1.713 | | | 0.313 | | 2.614 |
| | (2.186)** | (1.188) | (-0.063) | (0.894) | | | (-1.302) | | | (2.859)*** | | (2.453) |
| 14 | 1.494 | 0.344 | -0.045 | 0.129 | | | -1.634 | | | 0.214 | -0.103 | 3.142 |
| | (2.286)** | (1.251) | (-0.625) | (1.207) | | | (-1.223) | | | (2.322)** | (1.792)* | (2.95) |
| 15 | 1.486 | 0.309 | -0.038 | 0.131 | | | | -7.638 | | 0.205 | -0.098 | 3.127 |
| | (2.278)** | (1.149) | (-0.513) | (1.214) | | | | (-1.435) | | (2.218)** | (1.724)* | (2.935) |
| 16 | 1.472 | 0.343 | -0.044 | 0.139 | | | | | -5.154 | 0.211 | -0.101 | 3.147 |
| | (2.259)** | (1.253) | (-0.599) | (1.269) | | | | | (-1.288) | (2.288)** | (1.763)* | (2.955) |
| 17 | 1.474 | 0.316 | -0.041 | 0.14 | | | -1.436 | -7.732 | | 0.213 | -0.097 | 3.252 |
| | (2.272)** | (1.188) | (-0.561) | (1.325) | | | (-1.15) | (-1.501) | | (2.329)** | (1.735)* | (3.028) |
| 18 | 1.433 | 0.321 | -0.027 | 0.151 | | | -1.661 | | -5.341 | 0.212 | -0.094 | 3.257 |
| | (2.216)** | (1.187) | (-0.346) | (1.331) | | | (-1.23) | | (-1.323) | (2.298)** | (1.68)* | (3.033) |
| 19 | 1.502 | 0.313 | -0.047 | 0.141 | | | | -7.709 | -4.204 | 0.214 | -0.101 | 3.252 |
| | (2.312)** | (1.186) | (-0.641) | (1.353) | | | | (-1.519) | (-1.148) | (2.328)** | (1.787)* | (3.028) |
| 20 | 1.457 | 0.299 | -0.026 | 0.153 | | | -1.39 | -7.737 | -4.445 | 0.216 | -0.094 | 3.368 |
| | (2.251)** | (1.146) | (-0.338) | (1.408) | | | (-1.113) | (-1.513) | (-1.197) | (2.333)** | (1.697)* | (3.112) |
| 21 | 0.814 | 0.281 | 0.007 | 0.157 | -0.077 | -0.03 | | | | | | 2.471 |
| | (1.971)** | (1.061) | (0.096) | (1.397) | (-0.597) | (-0.447) | | | | | | (2.31) |
| 22 | 1.565 | 0.353 | -0.048 | 0.173 | -0.058 | -0.019 | -1.78 | | | | -0.137 | 3.201 |
| | (2.372)** | (1.282) | (-0.677) | (1.523) | (-0.454) | (-0.3) | (-1.278) | | | | (2.315)** | (2.977) |
| 23 | 0.953 | 0.324 | -0.001 | 0.111 | -0.1 | -0.047 | -1.866 | | | 0.308 | | 2.938 |
| | (2.136)** | (1.199) | (-0.012) | (1.038) | (-0.79) | (-0.719) | (-1.352) | | | (2.93)*** | | (2.713) |
| 24 | 1.467 | 0.345 | -0.041 | 0.137 | -0.074 | -0.031 | -1.765 | | | 0.215 | -0.1 | 3.424 |
| | (2.262)** | (1.261) | (-0.586) | (1.289) | (-0.61) | (-0.487) | (-1.267) | | | (2.406)** | (1.807)* | (3.168) |
| 25 | 1.468 | 0.318 | -0.037 | 0.135 | -0.063 | -0.027 | | -7.759 | | 0.207 | -0.097 | 3.409 |
| | (2.259)** | (1.184) | (-0.53) | (1.283) | (-0.541) | (-0.434) | | (-1.425) | | (2.305)** | (1.764)* | (3.153) |
| 26 | 1.457 | 0.346 | -0.043 | 0.144 | -0.069 | -0.032 | | | -5.321 | 0.213 | -0.099 | 3.428 |
| | (2.248)** | (1.266) | (-0.61) | (1.33) | (-0.574) | (-0.504) | | | (-1.3) | (2.373)** | (1.802)* | (3.172) |
| 27 | 1.473 | 0.32 | -0.046 | 0.144 | -0.051 | -0.011 | -1.522 | -7.855 | | 0.216 | -0.097 | 3.528 |
| | (2.269)** | (1.198) | (-0.68) | (1.421) | (-0.443) | (-0.196) | (-1.174) | (-1.491) | | (2.414)** | (1.779)* | (3.24) |
| 28 | 1.433 | 0.332 | -0.029 | 0.147 | -0.061 | -0.039 | -1.773 | | -5.566 | 0.217 | -0.094 | 3.527 |
| | (2.215)** | (1.221) | (-0.396) | (1.341) | (-0.517) | (-0.608) | (-1.275) | | (-1.348) | (2.405)** | (1.731)* | (3.239) |
| 29 | 1.492 | 0.312 | -0.05 | 0.144 | -0.044 | -0.016 | | -7.666 | -4.313 | 0.216 | -0.099 | 3.529 |
| | (2.292)** | (1.189) | (-0.729) | (1.433) | (-0.383) | (-0.266) | | (-1.506) | (-1.164) | (2.411)** | (1.809)* | (3.242) |
| 30 | 1.466 | 0.306 | -0.033 | 0.15 | -0.04 | -0.019 | -1.464 | -7.734 | -4.562 | 0.221 | -0.095 | 3.64 |
| | (2.256)** | (1.172) | (-0.46) | (1.441) | (-0.357) | (-0.328) | (-1.149) | (-1.504) | (-1.213) | (2.434)** | (1.754)* | (3.321) |

| # | $\hat{\lambda}_{\text{intercept}}$ | $\hat{\lambda}_{\beta_{MktRF}}$ | $\hat{\lambda}_{\beta_{SMB}}$ | $\hat{\lambda}_{\beta_{HML}}$ | $\hat{\lambda}_{\beta_{RMW}}$ | $\hat{\lambda}_{\beta_{CMA}}$ | $\hat{\lambda}_{\beta_{INDew}}$ | $\hat{\lambda}_{\beta_{MKTew}}$ | $\hat{\lambda}_{\beta_{FIRMew}}$ | $\hat{\lambda}_{\text{ln.BM}}$ | $\hat{\lambda}_{\text{ln.ME}}$ | $R^2$, $\bar{R}^2$ (in %) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.856 | 0.24 | | | | | | | | | | 1.674 |
| | (1.995)** | (0.875) | | | | | | | | | | (1.641) |
| 2 | 1.457 | 0.31 | | | | | -0.768 | | | | -0.121 | 2.52 |
| | (2.121)** | (1.036) | | | | | (-1.497) | | | | (1.976)** | (2.424) |
| 3 | 0.924 | 0.335 | | | | | -0.814 | | | 0.315 | | 2.232 |
| | (2.003)** | (1.147) | | | | | (-1.602) | | | (2.841)*** | | (2.135) |
| 4 | 1.344 | 0.324 | | | | | -0.776 | | | 0.237 | -0.082 | 2.797 |
| | (1.992)** | (1.112) | | | | | (-1.517) | | | (2.405)** | (-1.405) | (2.668) |
| 5 | 1.337 | 0.279 | | | | | | -6.312 | | 0.236 | -0.077 | 2.786 |
| | (2.019)** | (1.003) | | | | | | (-1.468) | | (2.393)** | (-1.363) | (2.657) |
| 6 | 1.356 | 0.308 | | | | | | | -23.762 | 0.238 | -0.083 | 2.767 |
| | (2.002)** | (1.065) | | | | | | | (-1.494) | (2.399)** | (-1.416) | (2.638) |
| 7 | 1.325 | 0.298 | | | | | -0.651 | -6.216 | | 0.243 | -0.078 | 2.915 |
| | (2.014)** | (1.052) | | | | | (-1.399) | (-1.52) | | (2.453)** | (-1.389) | (2.755) |
| 8 | 1.319 | 0.334 | | | | | -0.737 | | -25.37 | 0.231 | -0.082 | 2.932 |
| | (1.948)* | (1.141) | | | | | (-1.434) | | (-1.504) | (2.312)** | (-1.399) | (2.771) |
| 9 | 1.362 | 0.299 | | | | | | -6.24 | -22.363 | 0.242 | -0.082 | 2.893 |
| | (2.05)** | (1.065) | | | | | | (-1.472) | (-1.433) | (2.463)** | (-1.453) | (2.732) |
| 10 | 1.304 | 0.318 | | | | | -0.638 | -6.222 | -21.692 | 0.234 | -0.079 | 3.04 |
| | (1.976)** | (1.119) | | | | | (-1.342) | (-1.482) | (-1.408) | (2.36)** | (-1.41) | (2.847) |
| 11 | 0.838 | 0.289 | -0.002 | 0.142 | | | | | | | | 2.116 |
| | (2.031)** | (1.076) | (-0.028) | (1.246) | | | | | | | | (2.019) |
| 12 | 1.567 | 0.385 | -0.047 | 0.176 | | | -0.74 | | | | -0.141 | 2.945 |
| | (2.36)** | (1.324) | (-0.592) | (1.469) | | | (-1.425) | | | | (2.287)** | (2.784) |
| 13 | 0.932 | 0.356 | 0.008 | 0.104 | | | -0.788 | | | 0.309 | | 2.639 |
| | (2.097)** | (1.244) | (0.091) | (0.928) | | | (-1.548) | | | (2.83)*** | | (2.479) |
| 14 | 1.456 | 0.374 | -0.035 | 0.138 | | | -0.745 | | | 0.209 | -0.103 | 3.168 |
| | (2.237)** | (1.297) | (-0.46) | (1.242) | | | (-1.44) | | | (2.298)** | (1.794)* | (2.976) |
| 15 | 1.467 | 0.336 | -0.036 | 0.128 | | | | -6.417 | | 0.208 | -0.099 | 3.144 |
| | (2.268)** | (1.201) | (-0.474) | (1.186) | | | | (-1.468) | | (2.281)** | (1.742)* | (2.951) |
| 16 | 1.48 | 0.365 | -0.041 | 0.138 | | | | | -22.367 | 0.21 | -0.106 | 3.135 |
| | (2.252)** | (1.248) | (-0.56) | (1.276) | | | | | (-1.347) | (2.307)** | (1.814)* | (2.943) |
| 17 | 1.461 | 0.342 | -0.038 | 0.141 | | | -0.616 | -6.28 | | 0.21 | -0.1 | 3.253 |
| | (2.261)** | (1.228) | (-0.516) | (1.299) | | | (-1.31) | (-1.517) | | (2.287)** | (1.779)* | (3.029) |
| 18 | 1.424 | 0.391 | -0.029 | 0.138 | | | -0.71 | | -23.768 | 0.209 | -0.102 | 3.294 |
| | (2.18)** | (1.33) | (-0.39) | (1.269) | | | (-1.359) | | (-1.389) | (2.305)** | (1.764)* | (3.07) |
| 19 | 1.477 | 0.344 | -0.026 | 0.144 | | | | -6.206 | -20.535 | 0.211 | -0.103 | 3.228 |
| | (2.27)** | (1.221) | (-0.345) | (1.376) | | | | (-1.448) | (-1.282) | (2.294)** | (1.814)* | (3.004) |
| 20 | 1.429 | 0.362 | -0.03 | 0.145 | | | -0.59 | -6.132 | -19.291 | 0.209 | -0.099 | 3.371 |
| | (2.203)** | (1.275) | (-0.391) | (1.361) | | | (-1.239) | (-1.468) | (-1.254) | (2.285)** | (1.762)* | (3.115) |
| 21 | 0.814 | 0.281 | 0.007 | 0.157 | -0.077 | -0.03 | | | | | | 2.471 |
| | (1.971)** | (1.061) | (0.096) | (1.397) | (-0.597) | (-0.447) | | | | | | (2.31) |
| 22 | 1.538 | 0.376 | -0.043 | 0.178 | -0.059 | -0.027 | -0.75 | | | | -0.137 | 3.222 |
| | (2.339)** | (1.319) | (-0.587) | (1.524) | (-0.459) | (-0.409) | (-1.426) | | | | (2.304)** | (2.998) |
| 23 | 0.923 | 0.349 | 0.007 | 0.114 | -0.103 | -0.056 | -0.799 | | | 0.305 | | 2.954 |
| | (2.075)** | (1.246) | (0.087) | (1.042) | (-0.808) | (-0.833) | (-1.539) | | | (2.91)*** | | (2.73) |
| 24 | 1.44 | 0.368 | -0.035 | 0.141 | -0.076 | -0.039 | -0.748 | | | 0.212 | -0.1 | 3.442 |
| | (2.227)** | (1.3) | (-0.49) | (1.3) | (-0.619) | (-0.6) | (-1.428) | | | (2.39)** | (1.803)* | (3.186) |
| 25 | 1.447 | 0.344 | -0.034 | 0.132 | -0.07 | -0.035 | | -6.571 | | 0.212 | -0.097 | 3.425 |
| | (2.244)** | (1.233) | (-0.484) | (1.244) | (-0.586) | (-0.55) | | (-1.457) | | (2.372)** | (1.772)* | (3.169) |
| 26 | 1.456 | 0.355 | -0.04 | 0.145 | -0.071 | -0.032 | | | -22.776 | 0.212 | -0.101 | 3.413 |
| | (2.228)** | (1.244) | (-0.575) | (1.361) | (-0.586) | (-0.496) | | | (-1.33) | (2.396)** | (1.808)* | (3.157) |
| 27 | 1.448 | 0.347 | -0.047 | 0.146 | -0.053 | -0.025 | -0.628 | -6.54 | | 0.214 | -0.098 | 3.523 |
| | (2.243)** | (1.245) | (-0.671) | (1.381) | (-0.447) | (-0.392) | (-1.276) | (-1.505) | | (2.385)** | (1.787)* | (3.236) |
| 28 | 1.414 | 0.379 | -0.032 | 0.143 | -0.077 | -0.041 | -0.7 | | -23.59 | 0.212 | -0.099 | 3.557 |
| | (2.183)** | (1.316) | (-0.456) | (1.354) | (-0.634) | (-0.645) | (-1.33) | | (-1.357) | (2.392)** | (1.772)* | (3.27) |
| 29 | 1.458 | 0.343 | -0.029 | 0.151 | -0.061 | -0.025 | | -6.431 | -20.729 | 0.215 | -0.1 | 3.496 |
| | (2.241)** | (1.231) | (-0.4) | (1.475) | (-0.518) | (-0.4) | | (-1.465) | (-1.251) | (2.387)** | (1.809)* | (3.209) |
| 30 | 1.416 | 0.362 | -0.037 | 0.154 | -0.057 | -0.025 | -0.607 | -6.557 | -20.004 | 0.214 | -0.097 | 3.635 |
| | (2.189)** | (1.278) | (-0.522) | (1.489) | (-0.479) | (-0.404) | (-1.212) | (-1.489) | (-1.214) | (2.382)** | (1.753)* | (3.316) |

# 2 Testing hypothesis 2, $\lambda_{\beta_{IIND}} = 0$

As I explained previously, herewith I only include the Newey-West t-statistics

## 2.1 SIC-49 industries

### 2.1.1 Newey-West t-statistics

| # | $\hat{\lambda}_{\text{intercept}}$ | $\hat{\lambda}_{\beta_{MktRF}}$ | $\hat{\lambda}_{\beta_{SMB}}$ | $\hat{\lambda}_{\beta_{HML}}$ | $\hat{\lambda}_{\beta_{RMW}}$ | $\hat{\lambda}_{\beta_{CMA}}$ | $\hat{\lambda}_{\beta_{IINDvw}}$ | $\hat{\lambda}_{\beta_{MKTvw}}$ | $\hat{\lambda}_{\beta_{AIFIRMvw}}$ | $R^2$, $\bar{R}^2$ (in %) |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.896 | -0.104 | | | | | | | | 1.595 |
| | (4.48)*** | (-0.817) | | | | | | | | (1.569) |
| 2 | 0.882 | -0.098 | | | | | -0.462 | | | 1.699 |
| | (4.388)*** | (-0.8) | | | | | (2.164)** | | | (1.645) |
| 3 | 0.831 | -0.074 | | | | | | -3.62 | | 1.918 |
| | (4.168)*** | (-0.569) | | | | | | (1.977)** | | (1.865) |
| 4 | 0.879 | -0.1 | | | | | | | -1.82 | 1.777 |
| | (4.397)*** | (-0.81) | | | | | | | (2.131)** | (1.723) |
| 5 | 0.901 | -0.128 | | | | | -0.308 | -1.928 | | 1.909 |
| | (4.486)*** | (-1.106) | | | | | (1.822)* | (2.114)** | | (1.828) |
| 6 | 0.898 | -0.116 | | | | | -0.254 | | -1.245 | 1.762 |
| | (4.45)*** | (-1.011) | | | | | (1.951)* | | (2.212)** | (1.681) |
| 7 | 0.895 | -0.124 | | | | | | -1.863 | -0.844 | 2.018 |
| | (4.473)*** | (-1.078) | | | | | | (1.981)** | (-1.538) | (1.938) |
| 8 | 0.906 | -0.132 | | | | | -0.147 | -1.395 | -0.64 | 1.994 |
| | (4.485)*** | (-1.215) | | | | | (-1.467) | (2.072)** | (-1.61) | (1.887) |
| 9 | 0.827 | -0.083 | -0.014 | 0.147 | | | | | | 2.753 |
| | (4.3)*** | (-0.762) | (-0.194) | (2.34)** | | | | | | (2.674) |
| 10 | 0.827 | -0.075 | -0.016 | 0.14 | | | -0.425 | | | 2.817 |
| | (4.281)*** | (-0.73) | (-0.217) | (2.276)** | | | (2.137)** | | | (2.711) |
| 11 | 0.78 | -0.042 | -0.002 | 0.15 | | | | -3.619 | | 2.938 |
| | (4.008)*** | (-0.372) | (-0.029) | (2.382)** | | | | (1.987)** | | (2.832) |
| 12 | 0.826 | -0.082 | -0.015 | 0.139 | | | | | -1.535 | 2.859 |
| | (4.308)*** | (-0.791) | (-0.201) | (2.252)** | | | | | (1.979)** | (2.753) |
| 13 | 0.845 | -0.091 | -0.019 | 0.137 | | | -0.282 | -1.99 | | 2.92 |
| | (4.331)*** | (-0.941) | (-0.267) | (2.256)** | | | (1.732)* | (2.196)** | | (2.788) |
| 14 | 0.849 | -0.097 | -0.021 | 0.133 | | | -0.219 | | -1.076 | 2.846 |
| | (4.396)*** | (-1.012) | (-0.285) | (2.177)** | | | (1.783)* | | (2.128)** | (2.713) |
| 15 | 0.842 | -0.095 | -0.02 | 0.134 | | | | -1.902 | -0.871 | 2.944 |
| | (4.317)*** | (-0.983) | (-0.278) | (2.233)** | | | | (2.076)** | (1.665)* | (2.812) |
| 16 | 0.856 | -0.105 | -0.025 | 0.129 | | | -0.151 | -1.472 | -0.679 | 2.942 |
| | (4.36)*** | (-1.138) | (-0.348) | (2.154)** | | | (-1.489) | (2.215)** | (1.764)* | (2.784) |
| 17 | 0.811 | -0.068 | -0.012 | 0.142 | -0.009 | 0.077 | | | | 3.098 |
| | (4.206)*** | (-0.632) | (-0.166) | (2.318)** | (-0.188) | (1.802)* | | | | (2.966) |
| 18 | 0.818 | -0.068 | -0.012 | 0.137 | -0.013 | 0.077 | -0.428 | | | 3.134 |
| | (4.229)*** | (-0.67) | (-0.168) | (2.297)** | (-0.293) | (1.831)* | (2.132)** | | | (2.976) |
| 19 | 0.767 | -0.031 | -0.001 | 0.148 | -0.014 | 0.072 | | -3.681 | | 3.26 |
| | (3.94)*** | (-0.272) | (-0.011) | (2.415)** | (-0.293) | (1.709)* | | (1.985)** | | (3.102) |
| 20 | 0.818 | -0.075 | -0.011 | 0.139 | -0.012 | 0.078 | | | -1.473 | 3.16 |
| | (4.263)*** | (-0.73) | (-0.16) | (2.339)** | (-0.278) | (1.873)* | | | (1.907)* | (3.001) |
| 21 | 0.837 | -0.084 | -0.016 | 0.134 | -0.007 | 0.079 | -0.286 | -2.001 | | 3.217 |
| | (4.285)*** | (-0.879) | (-0.234) | (2.285)** | (-0.152) | (1.948)* | (1.733)* | (2.201)** | | (3.032) |
| 22 | 0.84 | -0.091 | -0.016 | 0.134 | -0.012 | 0.081 | -0.227 | | -1.127 | 3.133 |
| | (4.342)*** | (-0.957) | (-0.228) | (2.274)** | (-0.289) | (1.978)** | (1.844)* | | (2.213)** | (2.948) |
| 23 | 0.839 | -0.092 | -0.019 | 0.133 | -0.004 | 0.077 | | -1.857 | -0.851 | 3.234 |
| | (4.297)*** | (-0.958) | (-0.271) | (2.309)** | (-0.103) | (1.92)* | | (2.034)** | (-1.625) | (3.049) |
| 24 | 0.851 | -0.101 | -0.022 | 0.128 | -0.005 | 0.081 | -0.145 | -1.484 | -0.688 | 3.216 |
| | (4.323)*** | (-1.116) | (-0.311) | (2.242)** | (-0.129) | (2.032)** | (-1.434) | (2.199)** | (1.77)* | (3.005) |

| # | $\hat{\lambda}_{\text{intercept}}$ | $\hat{\lambda}_{\beta_{MktRF}}$ | $\hat{\lambda}_{\beta_{SMB}}$ | $\hat{\lambda}_{\beta_{HML}}$ | $\hat{\lambda}_{\beta_{RMW}}$ | $\hat{\lambda}_{\beta_{CMA}}$ | $\hat{\lambda}_{\beta_{IINDew}}$ | $\hat{\lambda}_{\beta_{MKTew}}$ | $\hat{\lambda}_{\beta_{AIFIRMew}}$ | $R^2$, $\bar{R}^2$ (in %) |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.896 | -0.104 | | | | | | | | 1.595 |
| | (4.48)*** | (-0.817) | | | | | | | | (1.569) |
| 2 | 0.887 | -0.091 | | | | | -0.243 | | | 1.685 |
| | (4.42)*** | (-0.721) | | | | | (1.764)* | | | (1.631) |
| 3 | 0.834 | -0.068 | | | | | | -2.438 | | 1.873 |
| | (4.14)*** | (-0.527) | | | | | | (1.908)* | | (1.819) |
| 4 | 0.863 | -0.055 | | | | | | | -14.016 | 1.765 |
| | (4.336)*** | (-0.431) | | | | | | | (2.579)** | (1.712) |
| 5 | 0.893 | -0.108 | | | | | -0.117 | -1.21 | | 1.894 |
| | (4.401)*** | (-0.907) | | | | | (-1.601) | (1.709)* | | (1.814) |
| 6 | 0.915 | -0.101 | | | | | -0.088 | | -8.065 | 1.756 |
| | (4.522)*** | (-0.886) | | | | | (-1.613) | | (2.91)*** | (1.675) |
| 7 | 0.862 | -0.064 | | | | | | -1.823 | -12.088 | 2.039 |
| | (4.279)*** | (-0.531) | | | | | | (1.997)** | (3.159)*** | (1.959) |
| 8 | 0.917 | -0.107 | | | | | -0.064 | -0.764 | -6.958 | 1.99 |
| | (4.479)*** | (-0.961) | | | | | (-1.39) | (-1.526) | (3.172)*** | (1.883) |
| 9 | 0.827 | -0.083 | -0.014 | 0.147 | | | | | | 2.753 |
| | (4.3)*** | (-0.762) | (-0.194) | (2.34)** | | | | | | (2.674) |
| 10 | 0.82 | -0.069 | -0.017 | 0.14 | | | -0.22 | | | 2.789 |
| | (4.277)*** | (-0.651) | (-0.237) | (2.21)** | | | (1.754)* | | | (2.683) |
| 11 | 0.785 | -0.043 | -0.004 | 0.146 | | | | -2.449 | | 2.927 |
| | (4.05)*** | (-0.386) | (-0.051) | (2.341)** | | | | (1.969)** | | (2.821) |
| 12 | 0.799 | -0.044 | -0.009 | 0.139 | | | | | -13.781 | 2.865 |
| | (4.187)*** | (-0.403) | (-0.123) | (2.187)** | | | | | (2.79)*** | (2.759) |
| 13 | 0.834 | -0.083 | -0.018 | 0.131 | | | -0.095 | -1.199 | | 2.91 |
| | (4.276)*** | (-0.836) | (-0.248) | (2.124)** | | | (-1.458) | (1.887)* | | (2.778) |
| 14 | 0.849 | -0.087 | -0.018 | 0.131 | | | -0.07 | | -8.297 | 2.827 |
| | (4.4)*** | (-0.924) | (-0.253) | (2.099)** | | | (-1.38) | | (3.674)*** | (2.695) |
| 15 | 0.803 | -0.045 | -0.01 | 0.135 | | | | -1.863 | -11.905 | 3.018 |
| | (4.128)*** | (-0.443) | (-0.128) | (2.17)** | | | | (2.178)** | (3.421)*** | (2.886) |
| 16 | 0.855 | -0.089 | -0.021 | 0.127 | | | -0.044 | -0.79 | -6.862 | 2.962 |
| | (4.349)*** | (-0.974) | (-0.289) | (2.075)** | | | (-1.069) | (1.776)* | (3.66)*** | (2.803) |
| 17 | 0.811 | -0.068 | -0.012 | 0.142 | -0.009 | 0.077 | | | | 3.098 |
| | (4.206)*** | (-0.632) | (-0.166) | (2.318)** | (-0.188) | (1.802)* | | | | (2.966) |
| 18 | 0.809 | -0.061 | -0.014 | 0.139 | -0.009 | 0.075 | -0.206 | | | 3.111 |
| | (4.21)*** | (-0.587) | (-0.194) | (2.265)** | (-0.211) | (1.765)* | (-1.628) | | | (2.952) |
| 19 | 0.772 | -0.031 | -0.001 | 0.144 | -0.012 | 0.071 | | -2.526 | | 3.253 |
| | (3.965)*** | (-0.281) | (-0.02) | (2.358)** | (-0.251) | (1.668)* | | (1.978)** | | (3.094) |
| 20 | 0.785 | -0.032 | -0.008 | 0.137 | -0.019 | 0.078 | | | -13.577 | 3.175 |
| | (4.103)*** | (-0.29) | (-0.113) | (2.208)** | (-0.414) | (1.823)* | | | (2.656)*** | (3.017) |
| 21 | 0.825 | -0.076 | -0.015 | 0.13 | -0.003 | 0.076 | -0.089 | -1.218 | | 3.203 |
| | (4.225)*** | (-0.784) | (-0.217) | (2.169)** | (-0.061) | (1.808)* | (-1.361) | (1.928)* | | (3.018) |
| 22 | 0.838 | -0.078 | -0.017 | 0.128 | -0.009 | 0.079 | -0.067 | | -7.985 | 3.118 |
| | (4.346)*** | (-0.837) | (-0.245) | (2.135)** | (-0.212) | (1.889)* | (-1.285) | | (3.502)*** | (2.933) |
| 23 | 0.794 | -0.037 | -0.011 | 0.132 | -0.013 | 0.075 | | -1.89 | -11.221 | 3.295 |
| | (4.074)*** | (-0.358) | (-0.146) | (2.175)** | (-0.288) | (1.798)* | | (2.191)** | (3.207)*** | (3.11) |
| 24 | 0.847 | -0.084 | -0.02 | 0.125 | -0.005 | 0.078 | -0.039 | -0.801 | -6.377 | 3.225 |
| | (4.309)*** | (-0.933) | (-0.278) | (2.103)** | (-0.126) | (1.898)* | (-0.939) | (1.843)* | (3.44)*** | (3.014) |

### 2.1.2 Newey-West t-statistics, controls

| # | $\hat{\lambda}_{\text{intercept}}$ | $\hat{\lambda}_{\beta_{MktRF}}$ | $\hat{\lambda}_{\beta_{SMB}}$ | $\hat{\lambda}_{\beta_{HML}}$ | $\hat{\lambda}_{\beta_{RMW}}$ | $\hat{\lambda}_{\beta_{CMA}}$ | $\hat{\lambda}_{\beta_{IINDvw}}$ | $\hat{\lambda}_{\beta_{MKTvw}}$ | $\hat{\lambda}_{\beta_{AIFIRMvw}}$ | $\hat{\lambda}_{\text{ln.BM}}$ | $\hat{\lambda}_{\text{ln.ME}}$ | $R^2$, $\bar{R}^2$ (in %) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.865 | -0.049 | | | | | | | | | | 1.596 |
| | (4.545)*** | (-0.387) | | | | | | | | | | (1.557) |
| 2 | 1.32 | -0.038 | | | | | -0.396 | | | | -0.106 | 2.926 |
| | (4.033)*** | (-0.309) | | | | | (2.081)** | | | | (2.691)*** | (2.809) |
| 3 | 0.886 | 0.015 | | | | | -0.442 | | | 0.343 | | 2.244 |
| | (4.519)*** | (0.127) | | | | | (2.208)** | | | (5.354)*** | | (2.126) |
| 4 | 1.197 | 0.017 | | | | | -0.428 | | | 0.26 | -0.074 | 3.368 |
| | (3.654)*** | (0.154) | | | | | (2.217)** | | | (3.757)*** | (1.755)* | (3.213) |
| 5 | 1.142 | 0.031 | | | | | | -2.877 | | 0.266 | -0.069 | 3.47 |
| | (3.55)*** | (0.269) | | | | | | (2.053)** | | (3.818)*** | (1.669)* | (3.315) |
| 6 | 1.194 | 0.015 | | | | | | | -1.697 | 0.26 | -0.074 | 3.431 |
| | (3.633)*** | (0.136) | | | | | | | (2.114)** | (3.785)*** | (1.752)* | (3.276) |
| 7 | 1.206 | -0.009 | | | | | -0.296 | -1.789 | | 0.261 | -0.071 | 3.501 |
| | (3.74)*** | (-0.081) | | | | | (1.941)* | (2.051)** | | (3.743)*** | (1.73)* | (3.308) |
| 8 | 1.208 | -0.002 | | | | | -0.255 | | -1.261 | 0.258 | -0.073 | 3.451 |
| | (3.642)*** | (-0.02) | | | | | (2.176)** | | (2.443)** | (3.732)*** | (1.716)* | (3.258) |
| 9 | 1.223 | -0.009 | | | | | | -1.668 | -0.941 | 0.256 | -0.074 | 3.545 |
| | (3.768)*** | (-0.089) | | | | | | (2.055)** | (1.848)* | (3.733)*** | (1.81)* | (3.352) |
| 10 | 1.232 | -0.022 | | | | | -0.17 | -1.204 | -0.789 | 0.255 | -0.073 | 3.577 |
| | (3.77)*** | (-0.222) | | | | | (1.852)* | (2.234)** | (2.127)** | (3.686)*** | (1.778)* | (3.345) |
| 11 | 0.801 | -0.045 | 0.021 | 0.153 | | | | | | | | 2.88 |
| | (4.346)*** | (-0.418) | (0.283) | (2.57)** | | | | | | | | (2.764) |
| 12 | 1.354 | -0.002 | -0.061 | 0.134 | | | -0.336 | | | | -0.114 | 3.693 |
| | (4.494)*** | (-0.02) | (-0.977) | (2.299)** | | | (2.01)** | | | | (3.264)*** | (3.501) |
| 13 | 0.869 | -0.006 | 0.01 | 0.077 | | | -0.365 | | | 0.302 | | 3.337 |
| | (4.524)*** | (-0.064) | (0.141) | (1.447) | | | (2.107)** | | | (5.021)*** | | (3.144) |
| 14 | 1.24 | 0.026 | -0.036 | 0.075 | | | -0.355 | | | 0.23 | -0.083 | 4.023 |
| | (4.119)*** | (0.262) | (-0.617) | (1.458) | | | (2.074)** | | | (3.618)*** | (2.271)** | (3.793) |
| 15 | 1.189 | 0.051 | -0.02 | 0.079 | | | | -2.773 | | 0.234 | -0.081 | 4.124 |
| | (3.974)*** | (0.484) | (-0.341) | (1.485) | | | | (2.001)** | | (3.687)*** | (2.219)** | (3.894) |
| 16 | 1.226 | 0.031 | -0.031 | 0.076 | | | | | -1.464 | 0.231 | -0.083 | 4.055 |
| | (4.08)*** | (0.297) | (-0.531) | (1.46) | | | | | (1.911)* | (3.671)*** | (2.259)** | (3.825) |
| 17 | 1.243 | 0.012 | -0.039 | 0.077 | | | -0.256 | -1.81 | | 0.229 | -0.081 | 4.135 |
| | (4.137)*** | (0.124) | (-0.669) | (1.521) | | | (1.674)* | (1.942)* | | (3.592)*** | (2.236)** | (3.866) |
| 18 | 1.24 | 0.008 | -0.034 | 0.067 | | | -0.212 | | -1.087 | 0.231 | -0.08 | 4.059 |
| | (4.109)*** | (0.087) | (-0.585) | (1.335) | | | (1.973)** | | (2.348)** | (3.65)*** | (2.192)** | (3.79) |
| 19 | 1.248 | 0.009 | -0.038 | 0.077 | | | | -1.764 | -1.002 | 0.229 | -0.082 | 4.149 |
| | (4.143)*** | (0.093) | (-0.664) | (1.541) | | | | (1.968)** | (1.927)* | (3.644)*** | (2.257)** | (3.88) |
| 20 | 1.251 | -0.005 | -0.04 | 0.069 | | | -0.171 | -1.28 | -0.824 | 0.229 | -0.08 | 4.155 |
| | (4.141)*** | (-0.055) | (-0.702) | (1.406) | | | (1.748)* | (2.205)** | (2.248)** | (3.605)*** | (2.191)** | (3.849) |
| 21 | 0.792 | -0.039 | 0.022 | 0.151 | -0.009 | 0.067 | | | | | | 3.29 |
| | (4.279)*** | (-0.365) | (0.309) | (2.587)** | (-0.2) | (1.578) | | | | | | (3.097) |
| 22 | 1.361 | -0.001 | -0.062 | 0.126 | 0.012 | 0.058 | -0.309 | | | | -0.115 | 4.044 |
| | (4.504)*** | (-0.01) | (-1.052) | (2.226)** | (0.3) | (1.368) | (1.887)* | | | | (3.318)*** | (3.776) |
| 23 | 0.873 | -0.007 | 0.01 | 0.074 | 0.003 | 0.032 | -0.344 | | | 0.304 | | 3.706 |
| | (4.535)*** | (-0.076) | (0.144) | (1.428) | (0.071) | (0.806) | (2.02)** | | | (5.109)*** | | (3.436) |
| 24 | 1.25 | 0.027 | -0.036 | 0.068 | 0.017 | 0.029 | -0.326 | | | 0.233 | -0.084 | 4.368 |
| | (4.128)*** | (0.278) | (-0.656) | (1.353) | (0.443) | (0.738) | (1.934)* | | | (3.661)*** | (2.301)** | (4.062) |
| 25 | 1.194 | 0.059 | -0.021 | 0.072 | 0.017 | 0.023 | | -2.876 | | 0.237 | -0.082 | 4.468 |
| | (3.968)*** | (0.557) | (-0.367) | (1.398) | (0.438) | (0.57) | | (1.956)* | | (3.736)*** | (2.261)** | (4.162) |
| 26 | 1.234 | 0.031 | -0.029 | 0.071 | 0.017 | 0.029 | | | -1.457 | 0.234 | -0.084 | 4.376 |
| | (4.088)*** | (0.31) | (-0.521) | (1.415) | (0.451) | (0.757) | | | (1.967)** | (3.7)*** | (2.284)** | (4.07) |
| 27 | 1.251 | 0.013 | -0.038 | 0.069 | 0.017 | 0.033 | -0.246 | -1.805 | | 0.232 | -0.082 | 4.455 |
| | (4.127)*** | (0.136) | (-0.685) | (1.412) | (0.444) | (0.856) | (-1.591) | (1.914)* | | (3.635)*** | (2.259)** | (4.111) |
| 28 | 1.253 | 0.007 | -0.033 | 0.061 | 0.014 | 0.031 | -0.2 | | -1.017 | 0.235 | -0.081 | 4.369 |
| | (4.13)*** | (0.076) | (-0.605) | (1.254) | (0.397) | (0.828) | (1.856)* | | (2.208)** | (3.71)*** | (2.221)** | (4.025) |
| 29 | 1.253 | 0.013 | -0.034 | 0.071 | 0.021 | 0.033 | | -1.863 | -1.081 | 0.231 | -0.083 | 4.458 |
| | (4.137)*** | (0.141) | (-0.622) | (1.476) | (0.601) | (0.869) | | (1.945)* | (2.02)** | (3.665)*** | (2.291)** | (4.114) |
| 30 | 1.263 | -0.004 | -0.037 | 0.061 | 0.017 | 0.033 | -0.168 | -1.33 | -0.8 | 0.232 | -0.081 | 4.451 |
| | (4.151)*** | (-0.047) | (-0.693) | (1.292) | (0.493) | (0.916) | (1.697)* | (2.11)** | (2.125)** | (3.66)*** | (2.228)** | (4.069) |

| # | $\hat{\lambda}_{\text{intercept}}$ | $\hat{\lambda}_{\beta_{MktRF}}$ | $\hat{\lambda}_{\beta_{SMB}}$ | $\hat{\lambda}_{\beta_{HML}}$ | $\hat{\lambda}_{\beta_{RMW}}$ | $\hat{\lambda}_{\beta_{CMA}}$ | $\hat{\lambda}_{\beta_{IINDew}}$ | $\hat{\lambda}_{\beta_{MKTew}}$ | $\hat{\lambda}_{\beta_{AIFIRMew}}$ | $\hat{\lambda}_{\text{ln.BM}}$ | $\hat{\lambda}_{\text{ln.ME}}$ | $R^2$, $\bar{R}^2$ (in % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.865 | -0.049 | | | | | | | | | | 1.596 |
| | (4.545)*** | (-0.387) | | | | | | | | | | (1.557) |
| 2 | 1.334 | -0.037 | | | | | -0.202 | | | | -0.108 | 2.9 |
| | (4.067)*** | (-0.297) | | | | | (1.651)* | | | | (2.725)*** | (2.784) |
| 3 | 0.894 | 0.015 | | | | | -0.204 | | | 0.342 | | 2.208 |
| | (4.572)*** | (0.131) | | | | | (1.653)* | | | (5.434)*** | | (2.09) |
| 4 | 1.216 | 0.017 | | | | | -0.202 | | | 0.258 | -0.076 | 3.345 |
| | (3.696)*** | (0.152) | | | | | (1.656)* | | | (3.761)*** | (1.804)* | (3.19) |
| 5 | 1.157 | 0.03 | | | | | | -1.949 | | 0.257 | -0.071 | 3.443 |
| | (3.568)*** | (0.261) | | | | | | (2.033)** | | (3.726)*** | (1.708)* | (3.288) |
| 6 | 1.197 | 0.048 | | | | | | | -12.696 | 0.264 | -0.077 | 3.445 |
| | (3.64)*** | (0.41) | | | | | | | (2.502)** | (3.802)*** | (1.801)* | (3.29) |
| 7 | 1.205 | 0.008 | | | | | -0.109 | -1.128 | | 0.258 | -0.074 | 3.478 |
| | (3.675)*** | (0.078) | | | | | (-1.589) | (1.882)* | | (3.75)*** | (1.763)* | (3.285) |
| 8 | 1.23 | 0.015 | | | | | -0.089 | | -7.503 | 0.26 | -0.076 | 3.46 |
| | (3.687)*** | (0.146) | | | | | (-1.543) | | (2.799)*** | (3.745)*** | (1.792)* | (3.267) |
| 9 | 1.198 | 0.037 | | | | | | -1.429 | -8.898 | 0.267 | -0.075 | 3.608 |
| | (3.674)*** | (0.334) | | | | | | (1.961)* | (2.623)*** | (3.859)*** | (1.809)* | (3.416) |
| 10 | 1.236 | 0.012 | | | | | -0.067 | -0.767 | -5.524 | 0.262 | -0.076 | 3.614 |
| | (3.72)*** | (0.12) | | | | | (-1.452) | (1.786)* | (2.521)** | (3.776)*** | (1.829)* | (3.382) |
| 11 | 0.801 | -0.045 | 0.021 | 0.153 | | | | | | | | 2.88 |
| | (4.346)*** | (-0.418) | (0.283) | (2.57)** | | | | | | | | (2.764) |
| 12 | 1.338 | 0.006 | -0.058 | 0.129 | | | -0.198 | | | | -0.113 | 3.659 |
| | (4.448)*** | (0.055) | (-0.94) | (2.121)** | | | (-1.584) | | | | (3.198)*** | (3.466) |
| 13 | 0.86 | 0.003 | 0.01 | 0.072 | | | -0.201 | | | 0.303 | | 3.292 |
| | (4.509)*** | (0.029) | (0.139) | (1.296) | | | (-1.63) | | | (5.078)*** | | (3.099) |
| 14 | 1.223 | 0.034 | -0.033 | 0.07 | | | -0.197 | | | 0.232 | -0.082 | 3.988 |
| | (4.069)*** | (0.325) | (-0.566) | (1.304) | | | (-1.589) | | | (3.69)*** | (2.208)** | (3.757) |
| 15 | 1.204 | 0.039 | -0.023 | 0.074 | | | | -1.804 | | 0.231 | -0.081 | 4.108 |
| | (4.028)*** | (0.375) | (-0.39) | (1.41) | | | | (2.039)** | | (3.653)*** | (2.218)** | (3.878) |
| 16 | 1.196 | 0.066 | -0.024 | 0.073 | | | | | -12.262 | 0.238 | -0.082 | 4.093 |
| | (3.97)*** | (0.609) | (-0.412) | (1.363) | | | | | (2.575)** | (3.741)*** | (2.192)** | (3.863) |
| 17 | 1.236 | 0.012 | -0.035 | 0.061 | | | -0.084 | -0.981 | | 0.233 | -0.08 | 4.111 |
| | (4.072)*** | (0.12) | (-0.612) | (1.179) | | | (-1.496) | (1.944)* | | (3.7)*** | (2.161)** | (3.843) |
| 18 | 1.23 | 0.026 | -0.028 | 0.063 | | | -0.075 | | -7.485 | 0.235 | -0.08 | 4.07 |
| | (4.033)*** | (0.276) | (-0.505) | (1.22) | | | (-1.37) | | (3.096)*** | (3.708)*** | (2.174)** | (3.802) |
| 19 | 1.224 | 0.046 | -0.029 | 0.065 | | | | -1.31 | -8.494 | 0.237 | -0.083 | 4.253 |
| | (4.037)*** | (0.46) | (-0.514) | (1.274) | | | | (1.943)* | (2.798)*** | (3.75)*** | (2.245)** | (3.985) |
| 20 | 1.248 | 0.014 | -0.032 | 0.059 | | | -0.043 | -0.69 | -5.418 | 0.235 | -0.081 | 4.223 |
| | (4.048)*** | (0.157) | (-0.577) | (1.19) | | | (-1.12) | (1.863)* | (2.828)*** | (3.718)*** | (2.188)** | (3.916) |
| 21 | 0.792 | -0.039 | 0.022 | 0.151 | -0.009 | 0.067 | | | | | | 3.29 |
| | (4.279)*** | (-0.365) | (0.309) | (2.587)** | (-0.2) | (1.578) | | | | | | (3.097) |
| 22 | 1.337 | 0.015 | -0.057 | 0.123 | 0.012 | 0.052 | -0.193 | | | | -0.114 | 4.018 |
| | (4.438)*** | (0.142) | (-0.972) | (2.052)** | (0.286) | (1.196) | (-1.525) | | | | (3.273)*** | (3.749) |
| 23 | 0.855 | 0.01 | 0.012 | 0.069 | 0.005 | 0.025 | -0.197 | | | 0.307 | | 3.669 |
| | (4.477)*** | (0.101) | (0.173) | (1.267) | (0.124) | (0.613) | (-1.562) | | | (5.188)*** | | (3.4) |
| 24 | 1.225 | 0.043 | -0.031 | 0.063 | 0.018 | 0.022 | -0.192 | | | 0.237 | -0.083 | 4.342 |
| | (4.056)*** | (0.423) | (-0.56) | (1.198) | (0.472) | (0.547) | (-1.523) | | | (3.756)*** | (2.252)** | (4.036) |
| 25 | 1.208 | 0.049 | -0.024 | 0.066 | 0.018 | 0.021 | | -1.87 | | 0.237 | -0.082 | 4.462 |
| | (4.009)*** | (0.474) | (-0.422) | (1.296) | (0.467) | (0.523) | | (2.052)** | | (3.753)*** | (2.256)** | (4.156) |
| 26 | 1.198 | 0.072 | -0.025 | 0.063 | 0.01 | 0.026 | | | -12.121 | 0.243 | -0.082 | 4.423 |
| | (3.96)*** | (0.674) | (-0.439) | (1.208) | (0.247) | (0.642) | | | (2.514)** | (3.821)*** | (2.215)** | (4.117) |
| 27 | 1.237 | 0.02 | -0.033 | 0.052 | 0.024 | 0.022 | -0.085 | -1.027 | | 0.238 | -0.081 | 4.444 |
| | (4.054)*** | (0.215) | (-0.609) | (1.031) | (0.66) | (0.555) | (-1.464) | (1.985)** | | (3.767)*** | (2.199)** | (4.1) |
| 28 | 1.231 | 0.031 | -0.028 | 0.052 | 0.017 | 0.026 | -0.072 | | -6.92 | 0.24 | -0.08 | 4.382 |
| | (4.015)*** | (0.342) | (-0.509) | (1.041) | (0.479) | (0.671) | (-1.347) | | (2.879)*** | (3.773)*** | (2.194)** | (4.037) |
| 29 | 1.218 | 0.055 | -0.027 | 0.054 | 0.015 | 0.025 | | -1.369 | -8.182 | 0.243 | -0.082 | 4.548 |
| | (4)*** | (0.562) | (-0.488) | (1.075) | (0.408) | (0.636) | | (2.048)** | (2.735)*** | (3.855)*** | (2.253)** | (4.205) |
| 30 | 1.246 | 0.02 | -0.029 | 0.048 | 0.02 | 0.026 | -0.045 | -0.708 | -5.101 | 0.241 | -0.081 | 4.509 |
| | (4.027)*** | (0.225) | (-0.539) | (1.005) | (0.579) | (0.708) | (-1.143) | (1.961)* | (2.665)*** | (3.799)*** | (2.204)** | (4.127) |

## 2.2 SIC-10 divisions

### 2.2.1 Newey-West t-statistics

| # | $\hat{\lambda}_{\text{intercept}}$ | $\hat{\lambda}_{\beta_{MktRF}}$ | $\hat{\lambda}_{\beta_{SMB}}$ | $\hat{\lambda}_{\beta_{HML}}$ | $\hat{\lambda}_{\beta_{RMW}}$ | $\hat{\lambda}_{\beta_{CMA}}$ | $\hat{\lambda}_{\beta_{IINDvw}}$ | $\hat{\lambda}_{\beta_{MKTvw}}$ | $\hat{\lambda}_{\beta_{AIFIRMvw}}$ | $R^2$, $\bar{R}^2$ (in %) |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.905 | -0.111 | | | | | | | | 1.604 |
| | (4.528)*** | (-0.874) | | | | | | | | (1.577) |
| 2 | 0.905 | -0.117 | | | | | -0.085 | | | 1.759 |
| | (4.464)*** | (-0.976) | | | | | (1.94)* | | | (1.705) |
| 3 | 0.841 | -0.082 | | | | | | -3.575 | | 1.929 |
| | (4.215)*** | (-0.627) | | | | | | (1.953)* | | (1.875) |
| 4 | 0.872 | -0.097 | | | | | | | -2.975 | 1.842 |
| | (4.348)*** | (-0.766) | | | | | | | (2.437)** | (1.788) |
| 5 | 0.908 | -0.14 | | | | | -0.054 | -1.757 | | 2.034 |
| | (4.56)*** | (-1.237) | | | | | (1.656)* | (2.141)** | | (1.953) |
| 6 | 0.905 | -0.127 | | | | | -0.059 | | -1.98 | 1.892 |
| | (4.478)*** | (-1.11) | | | | | (1.854)* | | (2.692)*** | (1.812) |
| 7 | 0.898 | -0.133 | | | | | | -2.02 | -1.833 | 2.119 |
| | (4.514)*** | (-1.133) | | | | | | (1.863)* | (2.175)** | (2.038) |
| 8 | 0.904 | -0.139 | | | | | -0.043 | -1.592 | -1.429 | 2.161 |
| | (4.525)*** | (-1.269) | | | | | (-1.601) | (2.136)** | (2.596)*** | (2.054) |
| 9 | 0.837 | -0.09 | -0.017 | 0.146 | | | | | | 2.765 |
| | (4.351)*** | (-0.824) | (-0.229) | (2.324)** | | | | | | (2.685) |
| 10 | 0.84 | -0.089 | -0.016 | 0.135 | | | -0.075 | | | 2.844 |
| | (4.337)*** | (-0.884) | (-0.215) | (2.178)** | | | (1.788)* | | | (2.737) |
| 11 | 0.79 | -0.049 | -0.005 | 0.149 | | | | -3.527 | | 2.951 |
| | (4.06)*** | (-0.439) | (-0.066) | (2.368)** | | | | (1.936)* | | (2.844) |
| 12 | 0.818 | -0.074 | -0.008 | 0.138 | | | | | -2.506 | 2.919 |
| | (4.257)*** | (-0.681) | (-0.113) | (2.225)** | | | | | (2.247)** | (2.812) |
| 13 | 0.859 | -0.104 | -0.021 | 0.134 | | | -0.047 | -1.713 | | 2.955 |
| | (4.394)*** | (-1.099) | (-0.299) | (2.208)** | | | (-1.553) | (2.243)** | | (2.822) |
| 14 | 0.845 | -0.093 | -0.017 | 0.13 | | | -0.055 | | -1.773 | 2.921 |
| | (4.352)*** | (-0.971) | (-0.235) | (2.113)** | | | (1.864)* | | (2.713)*** | (2.788) |
| 15 | 0.842 | -0.096 | -0.013 | 0.133 | | | | -2.06 | -1.707 | 3.028 |
| | (4.341)*** | (-0.953) | (-0.184) | (2.219)** | | | | (1.89)* | (2.075)** | (2.895) |
| 16 | 0.857 | -0.103 | -0.022 | 0.126 | | | -0.043 | -1.57 | -1.331 | 3.036 |
| | (4.391)*** | (-1.108) | (-0.314) | (2.103)** | | | (1.683)* | (2.189)** | (2.544)** | (2.876) |
| 17 | 0.819 | -0.075 | -0.014 | 0.141 | -0.006 | 0.075 | | | | 3.112 |
| | (4.253)*** | (-0.686) | (-0.197) | (2.292)** | (-0.138) | (1.76)* | | | | (2.98) |
| 18 | 0.832 | -0.083 | -0.011 | 0.132 | -0.008 | 0.075 | -0.069 | | | 3.157 |
| | (4.303)*** | (-0.841) | (-0.15) | (2.189)** | (-0.172) | (1.768)* | (1.683)* | | | (2.998) |
| 19 | 0.777 | -0.037 | -0.003 | 0.147 | -0.012 | 0.07 | | -3.589 | | 3.276 |
| | (3.988)*** | (-0.329) | (-0.048) | (2.392)** | (-0.251) | (1.67)* | | (1.933)* | | (3.117) |
| 20 | 0.81 | -0.067 | -0.005 | 0.138 | -0.013 | 0.072 | | | -2.434 | 3.227 |
| | (4.214)*** | (-0.628) | (-0.075) | (2.303)** | (-0.292) | (1.73)* | | | (2.246)** | (3.068) |
| 21 | 0.851 | -0.098 | -0.018 | 0.13 | 0 | 0.076 | -0.041 | -1.694 | | 3.254 |
| | (4.354)*** | (-1.048) | (-0.259) | (2.207)** | (-0.003) | (1.849)* | (-1.369) | (2.2)** | | (3.068) |
| 22 | 0.841 | -0.089 | -0.013 | 0.129 | -0.007 | 0.073 | -0.051 | | -1.731 | 3.207 |
| | (4.332)*** | (-0.935) | (-0.186) | (2.175)** | (-0.18) | (1.775)* | (1.717)* | | (2.713)*** | (3.021) |
| 23 | 0.835 | -0.089 | -0.012 | 0.131 | -0.005 | 0.073 | | -2.002 | -1.648 | 3.317 |
| | (4.31)*** | (-0.899) | (-0.164) | (2.267)** | (-0.13) | (1.816)* | | (1.899)* | (2.072)** | (3.132) |
| 24 | 0.853 | -0.099 | -0.02 | 0.123 | -0.002 | 0.074 | -0.038 | -1.536 | -1.32 | 3.307 |
| | (4.366)*** | (-1.07) | (-0.285) | (2.144)** | (-0.041) | (1.859)* | (-1.525) | (2.175)** | (2.58)** | (3.095) |

| # | $\hat{\lambda}_{\text{intercept}}$ | $\hat{\lambda}_{\beta_{MktRF}}$ | $\hat{\lambda}_{\beta_{SMB}}$ | $\hat{\lambda}_{\beta_{HML}}$ | $\hat{\lambda}_{\beta_{RMW}}$ | $\hat{\lambda}_{\beta_{CMA}}$ | $\hat{\lambda}_{\beta_{IINDew}}$ | $\hat{\lambda}_{\beta_{MKTew}}$ | $\hat{\lambda}_{\beta_{AIFIRMew}}$ | $R^2$, $\bar{R}^2$ (in %) |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.905 | -0.111 | | | | | | | | 1.604 |
| | (4.528)*** | (-0.874) | | | | | | | | (1.577) |
| 2 | 0.891 | -0.101 | | | | | -0.066 | | | 1.775 |
| | (4.468)*** | (-0.815) | | | | | (1.768)* | | | (1.721) |
| 3 | 0.844 | -0.076 | | | | | | -2.385 | | 1.881 |
| | (4.187)*** | (-0.583) | | | | | | (1.862)* | | (1.827) |
| 4 | 0.855 | -0.051 | | | | | | | -14.664 | 1.865 |
| | (4.292)*** | (-0.393) | | | | | | | (2.375)** | (1.811) |
| 5 | 0.911 | -0.126 | | | | | -0.03 | -0.94 | | 2.007 |
| | (4.496)*** | (-1.077) | | | | | (-1.521) | (1.679)* | | (1.926) |
| 6 | 0.907 | -0.103 | | | | | -0.041 | | -9.498 | 1.961 |
| | (4.512)*** | (-0.906) | | | | | (-1.634) | | (2.649)*** | (1.88) |
| 7 | 0.854 | -0.059 | | | | | | -2.13 | -13.454 | 2.156 |
| | (4.239)*** | (-0.476) | | | | | | (1.856)* | (2.545)** | (2.076) |
| 8 | 0.918 | -0.118 | | | | | -0.029 | -0.909 | -7.369 | 2.208 |
| | (4.516)*** | (-1.073) | | | | | (-1.545) | (1.716)* | (2.756)*** | (2.1) |
| 9 | 0.837 | -0.09 | -0.017 | 0.146 | | | | | | 2.765 |
| | (4.351)*** | (-0.824) | (-0.229) | (2.324)** | | | | | | (2.685) |
| 10 | 0.827 | -0.081 | -0.011 | 0.137 | | | -0.061 | | | 2.832 |
| | (4.319)*** | (-0.787) | (-0.148) | (2.172)** | | | (1.742)* | | | (2.726) |
| 11 | 0.795 | -0.05 | -0.006 | 0.145 | | | | -2.368 | | 2.939 |
| | (4.103)*** | (-0.45) | (-0.087) | (2.324)** | | | | (1.898)* | | (2.833) |
| 12 | 0.792 | -0.048 | -0.006 | 0.14 | | | | | -13.812 | 2.914 |
| | (4.145)*** | (-0.415) | (-0.088) | (2.206)** | | | | | (2.392)** | (2.808) |
| 13 | 0.849 | -0.095 | -0.019 | 0.128 | | | -0.029 | -0.925 | | 2.95 |
| | (4.362)*** | (-0.978) | (-0.266) | (2.067)** | | | (1.671)* | (1.875)* | | (2.817) |
| 14 | 0.834 | -0.082 | -0.012 | 0.133 | | | -0.038 | | -8.845 | 2.937 |
| | (4.323)*** | (-0.85) | (-0.16) | (2.138)** | | | (1.688)* | | (2.94)*** | (2.804) |
| 15 | 0.793 | -0.046 | -0.004 | 0.139 | | | | -2.048 | -12.388 | 3.085 |
| | (4.078)*** | (-0.43) | (-0.06) | (2.255)** | | | | (1.941)* | (2.639)*** | (2.953) |
| 16 | 0.847 | -0.09 | -0.019 | 0.127 | | | -0.029 | -0.895 | -6.933 | 3.075 |
| | (4.335)*** | (-0.962) | (-0.259) | (2.096)** | | | (1.718)* | (1.928)* | (3.034)*** | (2.916) |
| 17 | 0.819 | -0.075 | -0.014 | 0.141 | -0.006 | 0.075 | | | | 3.112 |
| | (4.253)*** | (-0.686) | (-0.197) | (2.292)** | (-0.138) | (1.76)* | | | | (2.98) |
| 18 | 0.823 | -0.076 | -0.012 | 0.136 | -0.007 | 0.07 | -0.057 | | | 3.154 |
| | (4.286)*** | (-0.748) | (-0.17) | (2.221)** | (-0.162) | (1.653)* | (1.661)* | | | (2.995) |
| 19 | 0.781 | -0.037 | -0.004 | 0.143 | -0.01 | 0.069 | | -2.445 | | 3.268 |
| | (4.012)*** | (-0.335) | (-0.056) | (2.334)** | (-0.21) | (1.626) | | (1.907)* | | (3.109) |
| 20 | 0.779 | -0.035 | -0.005 | 0.138 | -0.018 | 0.072 | | | -14.079 | 3.231 |
| | (4.073)*** | (-0.305) | (-0.071) | (2.239)** | (-0.38) | (1.67)* | | | (2.371)** | (3.072) |
| 21 | 0.842 | -0.088 | -0.019 | 0.127 | -0.003 | 0.07 | -0.029 | -0.958 | | 3.246 |
| | (4.328)*** | (-0.927) | (-0.263) | (2.126)** | (-0.061) | (1.683)* | (1.649)* | (1.923)* | | (3.06) |
| 22 | 0.827 | -0.073 | -0.013 | 0.13 | -0.009 | 0.073 | -0.037 | | -8.815 | 3.227 |
| | (4.291)*** | (-0.764) | (-0.179) | (2.167)** | (-0.198) | (1.753)* | (1.695)* | | (2.976)*** | (3.042) |
| 23 | 0.781 | -0.035 | -0.003 | 0.136 | -0.014 | 0.07 | | -2.085 | -12.042 | 3.367 |
| | (4.019)*** | (-0.33) | (-0.046) | (2.267)** | (-0.308) | (1.68)* | | (1.961)* | (2.56)** | (3.182) |
| 24 | 0.839 | -0.082 | -0.017 | 0.125 | -0.006 | 0.071 | -0.028 | -0.925 | -6.691 | 3.335 |
| | (4.3)*** | (-0.894) | (-0.244) | (2.139)** | (-0.144) | (1.754)* | (1.729)* | (2.019)** | (3.031)*** | (3.123) |

### 2.2.2 Newey-West t-statistics, controls

| # | $\hat{\lambda}_{\text{intercept}}$ | $\hat{\lambda}_{\beta_{MktRF}}$ | $\hat{\lambda}_{\beta_{SMB}}$ | $\hat{\lambda}_{\beta_{HML}}$ | $\hat{\lambda}_{\beta_{RMW}}$ | $\hat{\lambda}_{\beta_{CMA}}$ | $\hat{\lambda}_{\beta_{IINDvw}}$ | $\hat{\lambda}_{\beta_{MKTvw}}$ | $\hat{\lambda}_{\beta_{AIFIRMvw}}$ | $\hat{\lambda}_{\text{ln.BM}}$ | $\hat{\lambda}_{\text{ln.ME}}$ | $R^2$, $\bar{R}^2$ (in %) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.869 | -0.053 | | | | | | | | | | 1.604 |
| | (4.569)*** | (-0.416) | | | | | | | | | | (1.564) |
| 2 | 1.336 | -0.039 | | | | | -0.084 | | | | -0.109 | 2.96 |
| | (4.06)*** | (-0.326) | | | | | (1.938)* | | | | (2.765)*** | (2.843) |
| 3 | 0.901 | 0.012 | | | | | -0.091 | | | 0.348 | | 2.308 |
| | (4.572)*** | (0.101) | | | | | (2.066)** | | | (5.515)*** | | (2.19) |
| 4 | 1.215 | 0.016 | | | | | -0.088 | | | 0.266 | -0.075 | 3.401 |
| | (3.693)*** | (0.141) | | | | | (2.043)** | | | (3.888)*** | (1.807)* | (3.246) |
| 5 | 1.144 | 0.028 | | | | | | -2.818 | | 0.272 | -0.068 | 3.477 |
| | (3.558)*** | (0.238) | | | | | | (2.009)** | | (3.937)*** | (-1.644) | (3.322) |
| 6 | 1.165 | 0.026 | | | | | | | -2.695 | 0.272 | -0.07 | 3.474 |
| | (3.565)*** | (0.226) | | | | | | | (2.376)** | (3.938)*** | (1.671)* | (3.319) |
| 7 | 1.224 | -0.017 | | | | | -0.056 | -1.481 | | 0.263 | -0.072 | 3.547 |
| | (3.807)*** | (-0.164) | | | | | (1.833)* | (1.958)* | | (3.868)*** | (1.775)* | (3.353) |
| 8 | 1.202 | 0 | | | | | -0.061 | | -1.922 | 0.265 | -0.071 | 3.514 |
| | (3.66)*** | (0.001) | | | | | (1.847)* | | (2.719)*** | (3.892)*** | (1.717)* | (3.321) |
| 9 | 1.224 | -0.012 | | | | | | -1.763 | -1.609 | 0.267 | -0.073 | 3.596 |
| | (3.798)*** | (-0.109) | | | | | | (1.948)* | (2.051)** | (3.868)*** | (1.788)* | (3.403) |
| 10 | 1.239 | -0.022 | | | | | -0.044 | -1.231 | -1.32 | 0.263 | -0.073 | 3.651 |
| | (3.84)*** | (-0.217) | | | | | (1.689)* | (1.887)* | (2.507)** | (3.862)*** | (1.833)* | (3.419) |
| 11 | 0.804 | -0.048 | 0.021 | 0.154 | | | | | | | | 2.89 |
| | (4.361)*** | (-0.443) | (0.289) | (2.573)** | | | | | | | | (2.773) |
| 12 | 1.339 | 0.005 | -0.055 | 0.125 | | | -0.079 | | | | -0.114 | 3.721 |
| | (4.442)*** | (0.052) | (-0.904) | (2.139)** | | | (1.921)* | | | | (3.264)*** | (3.528) |
| 13 | 0.862 | 0.002 | 0.015 | 0.067 | | | -0.084 | | | 0.308 | | 3.378 |
| | (4.482)*** | (0.024) | (0.216) | (1.252) | | | (2.009)** | | | (5.185)*** | | (3.184) |
| 14 | 1.222 | 0.033 | -0.03 | 0.065 | | | -0.082 | | | 0.239 | -0.081 | 4.055 |
| | (4.058)*** | (0.33) | (-0.518) | (1.26) | | | (1.967)** | | | (3.784)*** | (2.222)** | (3.825) |
| 15 | 1.19 | 0.049 | -0.019 | 0.078 | | | | -2.723 | | 0.24 | -0.08 | 4.133 |
| | (3.978)*** | (0.462) | (-0.325) | (1.471) | | | | (1.965)* | | (3.817)*** | (2.192)** | (3.902) |
| 16 | 1.205 | 0.044 | -0.02 | 0.071 | | | | | -2.286 | 0.24 | -0.081 | 4.108 |
| | (4.027)*** | (0.419) | (-0.338) | (1.348) | | | | | (2.156)** | (3.799)*** | (2.224)** | (3.877) |
| 17 | 1.247 | 0.008 | -0.04 | 0.071 | | | -0.055 | -1.476 | | 0.236 | -0.081 | 4.166 |
| | (4.109)*** | (0.087) | (-0.7) | (1.415) | | | (1.806)* | (2.026)** | | (3.732)*** | (2.209)** | (3.897) |
| 18 | 1.22 | 0.021 | -0.03 | 0.062 | | | -0.058 | | -1.789 | 0.239 | -0.079 | 4.14 |
| | (4.039)*** | (0.216) | (-0.515) | (1.217) | | | (1.945)* | | (2.812)*** | (3.805)*** | (2.168)** | (3.871) |
| 19 | 1.238 | 0.017 | -0.028 | 0.071 | | | | -1.936 | -1.541 | 0.241 | -0.082 | 4.217 |
| | (4.133)*** | (0.174) | (-0.492) | (1.404) | | | | (1.891)* | (1.89)* | (3.803)*** | (2.256)** | (3.949) |
| 20 | 1.249 | 0.004 | -0.039 | 0.064 | | | -0.049 | -1.341 | -1.358 | 0.24 | -0.08 | 4.249 |
| | (4.124)*** | (0.048) | (-0.687) | (1.299) | | | (1.821)* | (1.924)* | (2.562)** | (3.786)*** | (2.22)** | (3.942) |
| 21 | 0.793 | -0.04 | 0.023 | 0.152 | -0.007 | 0.067 | | | | | | 3.299 |
| | (4.283)*** | (-0.376) | (0.32) | (2.594)*** | (-0.16) | (1.577) | | | | | | (3.106) |
| 22 | 1.346 | 0.009 | -0.055 | 0.12 | 0.012 | 0.052 | -0.075 | | | | -0.115 | 4.06 |
| | (4.462)*** | (0.085) | (-0.935) | (2.101)** | (0.297) | (1.218) | (1.864)* | | | | (3.336)*** | (3.791) |
| 23 | 0.863 | 0.002 | 0.017 | 0.066 | 0.003 | 0.026 | -0.079 | | | 0.309 | | 3.73 |
| | (4.493)*** | (0.023) | (0.245) | (1.28) | (0.078) | (0.664) | (1.935)* | | | (5.239)*** | | (3.46) |
| 24 | 1.233 | 0.036 | -0.029 | 0.06 | 0.017 | 0.023 | -0.077 | | | 0.24 | -0.083 | 4.388 |
| | (4.076)*** | (0.367) | (-0.519) | (1.207) | (0.435) | (0.58) | (1.905)* | | | (3.78)*** | (2.276)** | (4.081) |
| 25 | 1.194 | 0.058 | -0.02 | 0.072 | 0.018 | 0.023 | | -2.824 | | 0.244 | -0.081 | 4.476 |
| | (3.966)*** | (0.551) | (-0.349) | (1.389) | (0.464) | (0.57) | | (1.92)* | | (3.872)*** | (2.235)** | (4.17) |
| 26 | 1.217 | 0.044 | -0.019 | 0.068 | 0.02 | 0.023 | | | -2.219 | 0.241 | -0.083 | 4.441 |
| | (4.041)*** | (0.434) | (-0.339) | (1.326) | (0.511) | (0.585) | | | (2.195)** | (3.821)*** | (2.266)** | (4.134) |
| 27 | 1.261 | 0.011 | -0.04 | 0.065 | 0.022 | 0.03 | -0.052 | -1.444 | | 0.237 | -0.083 | 4.484 |
| | (4.124)*** | (0.12) | (-0.727) | (1.336) | (0.62) | (0.802) | (1.732)* | (1.993)** | | (3.727)*** | (2.273)** | (4.14) |
| 28 | 1.236 | 0.022 | -0.029 | 0.059 | 0.019 | 0.025 | -0.053 | | -1.688 | 0.239 | -0.081 | 4.453 |
| | (4.064)*** | (0.237) | (-0.518) | (1.201) | (0.535) | (0.66) | (1.789)* | | (2.72)*** | (3.783)*** | (2.227)** | (4.108) |
| 29 | 1.24 | 0.025 | -0.025 | 0.068 | 0.023 | 0.03 | | -2.042 | -1.624 | 0.241 | -0.083 | 4.538 |
| | (4.111)*** | (0.25) | (-0.443) | (1.384) | (0.624) | (0.788) | | (1.874)* | (1.972)** | (3.798)*** | (2.301)** | (4.194) |
| 30 | 1.263 | 0.006 | -0.037 | 0.06 | 0.023 | 0.031 | -0.046 | -1.322 | -1.314 | 0.238 | -0.083 | 4.555 |
| | (4.131)*** | (0.071) | (-0.679) | (1.276) | (0.652) | (0.856) | (1.698)* | (1.893)* | (2.512)** | (3.73)*** | (2.281)** | (4.172) |

| # | $\hat{\lambda}_{\text{intercept}}$ | $\hat{\lambda}_{\beta_{MktRF}}$ | $\hat{\lambda}_{\beta_{SMB}}$ | $\hat{\lambda}_{\beta_{HML}}$ | $\hat{\lambda}_{\beta_{RMW}}$ | $\hat{\lambda}_{\beta_{CMA}}$ | $\hat{\lambda}_{\beta_{IINDew}}$ | $\hat{\lambda}_{\beta_{MKTew}}$ | $\hat{\lambda}_{\beta_{AIFIRMew}}$ | $\hat{\lambda}_{\text{ln.BM}}$ | $\hat{\lambda}_{\text{ln.ME}}$ | $R^2$, $\bar{R}^2$ (in % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.869 | -0.053 | | | | | | | | | | 1.604 |
| | (4.569)*** | (-0.416) | | | | | | | | | | (1.564) |
| 2 | 1.327 | -0.035 | | | | | -0.057 | | | | -0.107 | 2.948 |
| | (4.063)*** | (-0.284) | | | | | (1.722)* | | | | (2.697)*** | (2.831) |
| 3 | 0.896 | 0.009 | | | | | -0.057 | | | 0.338 | | 2.282 |
| | (4.611)*** | (0.078) | | | | | (1.718)* | | | (5.453)*** | | (2.165) |
| 4 | 1.211 | 0.017 | | | | | -0.056 | | | 0.256 | -0.076 | 3.385 |
| | (3.696)*** | (0.149) | | | | | (1.689)* | | | (3.763)*** | (1.781)* | (3.23) |
| 5 | 1.159 | 0.026 | | | | | | -1.91 | | 0.263 | -0.07 | 3.451 |
| | (3.576)*** | (0.229) | | | | | | (1.989)** | | (3.844)*** | (1.681)* | (3.296) |
| 6 | 1.191 | 0.059 | | | | | | | -13.743 | 0.27 | -0.078 | 3.493 |
| | (3.653)*** | (0.491) | | | | | | | (2.446)** | (3.924)*** | (1.867)* | (3.338) |
| 7 | 1.217 | 0 | | | | | -0.032 | -1.04 | | 0.256 | -0.074 | 3.531 |
| | (3.724)*** | (-0.002) | | | | | (1.852)* | (2.243)** | | (3.758)*** | (1.762)* | (3.338) |
| 8 | 1.239 | 0.009 | | | | | -0.033 | | -8.865 | 0.261 | -0.077 | 3.565 |
| | (3.774)*** | (0.082) | | | | | (-1.575) | | (2.605)*** | (3.808)*** | (1.869)* | (3.371) |
| 9 | 1.206 | 0.045 | | | | | | -1.678 | -10.45 | 0.27 | -0.078 | 3.661 |
| | (3.753)*** | (0.4) | | | | | | (1.883)* | (2.441)** | (3.966)*** | (1.929)* | (3.468) |
| 10 | 1.255 | 0.003 | | | | | -0.024 | -0.872 | -6.786 | 0.259 | -0.079 | 3.706 |
| | (3.872)*** | (0.025) | | | | | (1.66)* | (2.053)** | (2.765)*** | (3.787)*** | (1.947)* | (3.475) |
| 11 | 0.804 | -0.048 | 0.021 | 0.154 | | | | | | | | 2.89 |
| | (4.361)*** | (-0.443) | (0.289) | (2.573)** | | | | | | | | (2.773) |
| 12 | 1.331 | 0.003 | -0.049 | 0.126 | | | -0.056 | | | | -0.112 | 3.693 |
| | (4.452)*** | (0.025) | (-0.786) | (2.084)** | | | (1.656)* | | | | (3.203)*** | (3.5) |
| 13 | 0.857 | 0 | 0.02 | 0.067 | | | -0.057 | | | 0.306 | | 3.338 |
| | (4.5)*** | (0.004) | (0.278) | (1.218) | | | (1.689)* | | | (5.156)*** | | (3.144) |
| 14 | 1.217 | 0.029 | -0.025 | 0.067 | | | -0.056 | | | 0.236 | -0.081 | 4.023 |
| | (4.08)*** | (0.287) | (-0.414) | (1.245) | | | (1.653)* | | | (3.779)*** | (2.2)** | (3.792) |
| 15 | 1.204 | 0.037 | -0.022 | 0.073 | | | | -1.771 | | 0.237 | -0.08 | 4.118 |
| | (4.031)*** | (0.352) | (-0.372) | (1.393) | | | | (2.001)** | | (3.782)*** | (2.189)** | (3.887) |
| 16 | 1.17 | 0.076 | -0.014 | 0.071 | | | | | -13.245 | 0.247 | -0.08 | 4.128 |
| | (3.905)*** | (0.677) | (-0.238) | (1.321) | | | | | (2.455)** | (3.904)*** | (2.166)** | (3.897) |
| 17 | 1.241 | 0.006 | -0.031 | 0.057 | | | -0.029 | -0.953 | | 0.237 | -0.08 | 4.145 |
| | (4.12)*** | (0.068) | (-0.523) | (1.12) | | | (1.967)** | (2.295)** | | (3.793)*** | (2.181)** | (3.876) |
| 18 | 1.218 | 0.029 | -0.02 | 0.065 | | | -0.032 | | -8.506 | 0.245 | -0.08 | 4.165 |
| | (4.042)*** | (0.303) | (-0.333) | (1.237) | | | (1.664)* | | (2.859)*** | (3.896)*** | (2.185)** | (3.896) |
| 19 | 1.206 | 0.052 | -0.022 | 0.069 | | | | -1.533 | -9.712 | 0.245 | -0.082 | 4.285 |
| | (4.017)*** | (0.51) | (-0.378) | (1.338) | | | | (1.893)* | (2.576)** | (3.88)*** | (2.258)** | (4.017) |
| 20 | 1.249 | 0.011 | -0.03 | 0.062 | | | -0.023 | -0.785 | -6.31 | 0.239 | -0.082 | 4.296 |
| | (4.133)*** | (0.115) | (-0.523) | (1.233) | | | (1.839)* | (2.173)** | (2.956)*** | (3.8)*** | (2.251)** | (3.989) |
| 21 | 0.793 | -0.04 | 0.023 | 0.152 | -0.007 | 0.067 | | | | | | 3.299 |
| | (4.283)*** | (-0.376) | (0.32) | (2.594)*** | (-0.16) | (1.577) | | | | | | (3.106) |
| 22 | 1.342 | 0.01 | -0.053 | 0.12 | 0.012 | 0.051 | -0.055 | | | | -0.115 | 4.052 |
| | (4.487)*** | (0.092) | (-0.892) | (2.036)** | (0.3) | (1.189) | (-1.63) | | | | (3.322)*** | (3.782) |
| 23 | 0.858 | 0.005 | 0.018 | 0.065 | 0.005 | 0.024 | -0.056 | | | 0.311 | | 3.714 |
| | (4.507)*** | (0.049) | (0.264) | (1.206) | (0.114) | (0.602) | (1.667)* | | | (5.287)*** | | (3.444) |
| 24 | 1.231 | 0.037 | -0.027 | 0.06 | 0.017 | 0.022 | -0.054 | | | 0.24 | -0.083 | 4.376 |
| | (4.106)*** | (0.369) | (-0.48) | (1.155) | (0.446) | (0.546) | (-1.631) | | | (3.836)*** | (2.278)** | (4.069) |
| 25 | 1.206 | 0.048 | -0.022 | 0.065 | 0.019 | 0.021 | | -1.836 | | 0.244 | -0.081 | 4.47 |
| | (4.007)*** | (0.467) | (-0.402) | (1.285) | (0.494) | (0.517) | | (2.012)** | | (3.888)*** | (2.228)** | (4.164) |
| 26 | 1.178 | 0.081 | -0.014 | 0.064 | 0.01 | 0.022 | | | -13.174 | 0.25 | -0.082 | 4.466 |
| | (3.918)*** | (0.743) | (-0.241) | (1.218) | (0.243) | (0.532) | | | (2.407)** | (3.946)*** | (2.227)** | (4.16) |
| 27 | 1.249 | 0.015 | -0.033 | 0.05 | 0.02 | 0.023 | -0.031 | -0.99 | | 0.24 | -0.082 | 4.475 |
| | (4.13)*** | (0.165) | (-0.593) | (1.017) | (0.539) | (0.604) | (2)** | (2.357)** | | (3.832)*** | (2.244)** | (4.13) |
| 28 | 1.238 | 0.035 | -0.021 | 0.057 | 0.019 | 0.024 | -0.032 | | -7.999 | 0.245 | -0.083 | 4.484 |
| | (4.1)*** | (0.372) | (-0.379) | (1.121) | (0.508) | (0.628) | (-1.612) | | (2.665)*** | (3.894)*** | (2.299)** | (4.139) |
| 29 | 1.205 | 0.062 | -0.019 | 0.06 | 0.014 | 0.021 | | -1.594 | -9.409 | 0.248 | -0.083 | 4.594 |
| | (3.987)*** | (0.615) | (-0.331) | (1.197) | (0.383) | (0.527) | | (1.977)** | (2.518)** | (3.95)*** | (2.295)** | (4.25) |
| 30 | 1.259 | 0.017 | -0.029 | 0.054 | 0.019 | 0.025 | -0.024 | -0.829 | -6.062 | 0.239 | -0.084 | 4.594 |
| | (4.152)*** | (0.194) | (-0.519) | (1.122) | (0.543) | (0.676) | (1.903)* | (2.29)** | (2.844)*** | (3.807)*** | (2.337)** | (4.212) |

## 2.3 Hoberg-Phillips FIC-25 industries

### 2.3.1 Newey-West t-statistics

| # | $\hat{\lambda}_{\text{intercept}}$ | $\hat{\lambda}_{\beta_{MktRF}}$ | $\hat{\lambda}_{\beta_{SMB}}$ | $\hat{\lambda}_{\beta_{HML}}$ | $\hat{\lambda}_{\beta_{RMW}}$ | $\hat{\lambda}_{\beta_{CMA}}$ | $\hat{\lambda}_{\beta_{IINDvw}}$ | $\hat{\lambda}_{\beta_{MKTvw}}$ | $\hat{\lambda}_{\beta_{AIFIRMvw}}$ | $R^2$, $\bar{R}^2$ (in %) |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.856 | 0.24 | | | | | | | | 1.674 |
| | (1.995)** | (0.875) | | | | | | | | (1.641) |
| 2 | 0.88 | 0.226 | | | | | -0.713 | | | 1.712 |
| | (2.059)** | (0.9) | | | | | (1.897)* | | | (1.648) |
| 3 | 0.809 | 0.246 | | | | | | -8.264 | | 1.892 |
| | (1.899)* | (0.886) | | | | | | (-1.568) | | (1.827) |
| 4 | 0.848 | 0.236 | | | | | | | -4.394 | 1.798 |
| | (1.992)** | (0.915) | | | | | | | (1.958)* | (1.733) |
| 5 | 0.918 | 0.16 | | | | | -0.43 | -4.916 | | 1.846 |
| | (2.156)** | (0.696) | | | | | (-1.528) | (1.848)* | | (1.749) |
| 6 | 0.908 | 0.184 | | | | | -0.492 | | -3.212 | 1.811 |
| | (2.098)** | (0.803) | | | | | (2.089)** | | (2.203)** | (1.714) |
| 7 | 0.922 | 0.155 | | | | | | -4.96 | -2.668 | 1.886 |
| | (2.167)** | (0.676) | | | | | | (1.701)* | (1.659)* | (1.788) |
| 8 | 0.953 | 0.127 | | | | | -0.323 | -3.57 | -2.136 | 1.907 |
| | (2.211)** | (0.589) | | | | | (-1.498) | (1.879)* | (1.907)* | (1.777) |
| 9 | 0.838 | 0.289 | -0.002 | 0.142 | | | | | | 2.116 |
| | (2.031)** | (1.076) | (-0.028) | (1.246) | | | | | | (2.019) |
| 10 | 0.878 | 0.273 | -0.019 | 0.12 | | | -0.732 | | | 2.146 |
| | (2.137)** | (1.149) | (-0.224) | (1.097) | | | (2.01)** | | | (2.017) |
| 11 | 0.839 | 0.286 | 0.012 | 0.15 | | | | -8.267 | | 2.303 |
| | (2.041)** | (1.058) | (0.142) | (1.272) | | | | (-1.55) | | (2.174) |
| 12 | 0.861 | 0.266 | 0.005 | 0.121 | | | | | -4.081 | 2.224 |
| | (2.109)** | (1.081) | (0.054) | (1.102) | | | | | (1.825)* | (2.095) |
| 13 | 0.949 | 0.206 | -0.014 | 0.113 | | | -0.483 | -4.982 | | 2.267 |
| | (2.298)** | (0.947) | (-0.162) | (1.06) | | | (1.834)* | (1.878)* | | (2.105) |
| 14 | 0.924 | 0.216 | -0.013 | 0.103 | | | -0.454 | | -2.985 | 2.213 |
| | (2.221)** | (1.006) | (-0.152) | (0.967) | | | (2.096)** | | (2.122)** | (2.052) |
| 15 | 0.949 | 0.195 | -0.004 | 0.111 | | | | -5.18 | -2.562 | 2.305 |
| | (2.307)** | (0.88) | (-0.045) | (1.052) | | | | (1.713)* | (-1.557) | (2.143) |
| 16 | 0.983 | 0.166 | -0.014 | 0.097 | | | -0.341 | -3.667 | -2.138 | 2.311 |
| | (2.351)** | (0.815) | (-0.164) | (0.944) | | | (1.769)* | (1.917)* | (1.96)* | (2.117) |
| 17 | 0.814 | 0.281 | 0.007 | 0.157 | -0.077 | -0.03 | | | | 2.471 |
| | (1.971)** | (1.061) | (0.096) | (1.397) | (-0.597) | (-0.447) | | | | (2.31) |
| 18 | 0.872 | 0.249 | -0.007 | 0.131 | -0.067 | -0.037 | -0.799 | | | 2.488 |
| | (2.119)** | (1.083) | (-0.097) | (1.239) | (-0.545) | (-0.561) | (2.232)** | | | (2.295) |
| 19 | 0.812 | 0.29 | 0.017 | 0.161 | -0.077 | -0.024 | | -8.44 | | 2.642 |
| | (1.956)* | (1.071) | (0.222) | (1.403) | (-0.599) | (-0.37) | | (-1.544) | | (2.449) |
| 20 | 0.858 | 0.247 | 0.011 | 0.132 | -0.071 | -0.038 | | | -3.692 | 2.543 |
| | (2.093)** | (1.036) | (0.138) | (1.241) | (-0.582) | (-0.578) | | | (1.718)* | (2.35) |
| 21 | 0.936 | 0.195 | -0.008 | 0.121 | -0.046 | -0.023 | -0.56 | -4.952 | | 2.58 |
| | (2.257)** | (0.906) | (-0.106) | (1.188) | (-0.392) | (-0.381) | (2.027)** | (1.822)* | | (2.355) |
| 22 | 0.922 | 0.199 | -0.007 | 0.11 | -0.049 | -0.037 | -0.522 | | -2.744 | 2.506 |
| | (2.197)** | (0.95) | (-0.097) | (1.073) | (-0.424) | (-0.579) | (2.426)** | | (2.024)** | (2.28) |
| 23 | 0.938 | 0.182 | 0 | 0.125 | -0.042 | -0.028 | | -5.093 | -2.369 | 2.616 |
| | (2.263)** | (0.842) | (-0.002) | (1.239) | (-0.361) | (-0.453) | | (1.704)* | (-1.435) | (2.39) |
| 24 | 0.976 | 0.15 | -0.01 | 0.104 | -0.028 | -0.028 | -0.397 | -3.563 | -1.945 | 2.597 |
| | (2.314)** | (0.752) | (-0.129) | (1.063) | (-0.251) | (-0.478) | (2.031)** | (1.873)* | (1.766)* | (2.339) |

| # | $\hat{\lambda}_{\text{intercept}}$ | $\hat{\lambda}_{\beta_{MktRF}}$ | $\hat{\lambda}_{\beta_{SMB}}$ | $\hat{\lambda}_{\beta_{HML}}$ | $\hat{\lambda}_{\beta_{RMW}}$ | $\hat{\lambda}_{\beta_{CMA}}$ | $\hat{\lambda}_{\beta_{IINDew}}$ | $\hat{\lambda}_{\beta_{MKTew}}$ | $\hat{\lambda}_{\beta_{AIFIRMew}}$ | $R^2$, $\bar{R}^2$ (in %) |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.856 | 0.24 | | | | | | | | 1.674 |
| | (1.995)** | (0.875) | | | | | | | | (1.641) |
| 2 | 0.866 | 0.247 | | | | | -0.612 | | | 1.767 |
| | (2.021)** | (0.933) | | | | | (1.662)* | | | (1.702) |
| 3 | 0.797 | 0.274 | | | | | | -6.7 | | 1.905 |
| | (1.874)* | (0.953) | | | | | | (-1.553) | | (1.841) |
| 4 | 0.811 | 0.294 | | | | | | | -24.275 | 1.848 |
| | (1.918)* | (1.037) | | | | | | | (1.697)* | (1.783) |
| 5 | 0.878 | 0.212 | | | | | -0.526 | -4.447 | | 1.887 |
| | (2.072)** | (0.847) | | | | | (1.674)* | (1.682)* | | (1.79) |
| 6 | 0.867 | 0.256 | | | | | -0.537 | | -19.522 | 1.895 |
| | (2.017)** | (0.979) | | | | | (-1.563) | | (1.805)* | (1.798) |
| 7 | 0.832 | 0.26 | | | | | | -5.179 | -18.125 | 1.98 |
| | (1.953)* | (0.987) | | | | | | (-1.566) | (-1.647) | (1.883) |
| 8 | 0.881 | 0.223 | | | | | -0.44 | -3.916 | -15.355 | 2.017 |
| | (2.048)** | (0.924) | | | | | (-1.573) | (-1.615) | (1.906)* | (1.888) |
| 9 | 0.838 | 0.289 | -0.002 | 0.142 | | | | | | 2.116 |
| | (2.031)** | (1.076) | (-0.028) | (1.246) | | | | | | (2.019) |
| 10 | 0.866 | 0.287 | -0.016 | 0.131 | | | -0.616 | | | 2.174 |
| | (2.098)** | (1.137) | (-0.186) | (1.152) | | | (1.673)* | | | (2.045) |
| 11 | 0.806 | 0.316 | 0.016 | 0.148 | | | | -6.797 | | 2.32 |
| | (1.976)** | (1.122) | (0.182) | (1.256) | | | | (-1.56) | | (2.191) |
| 12 | 0.81 | 0.318 | 0.008 | 0.148 | | | | | -22.904 | 2.242 |
| | (2.001)** | (1.144) | (0.09) | (1.262) | | | | | (-1.647) | (2.113) |
| 13 | 0.898 | 0.256 | -0.012 | 0.12 | | | -0.544 | -4.646 | | 2.262 |
| | (2.183)** | (1.06) | (-0.142) | (1.108) | | | (1.703)* | (1.728)* | | (2.101) |
| 14 | 0.893 | 0.266 | -0.016 | 0.125 | | | -0.513 | | -17.32 | 2.258 |
| | (2.148)** | (1.081) | (-0.186) | (1.099) | | | (-1.568) | | (1.724)* | (2.097) |
| 15 | 0.84 | 0.279 | 0.015 | 0.134 | | | | -5.111 | -16.743 | 2.365 |
| | (2.055)** | (1.083) | (0.168) | (1.21) | | | | (-1.567) | (-1.567) | (2.204) |
| 16 | 0.927 | 0.224 | -0.015 | 0.112 | | | -0.421 | -3.755 | -13.399 | 2.36 |
| | (2.215)** | (0.987) | (-0.17) | (1.043) | | | (-1.583) | (-1.621) | (1.767)* | (2.166) |
| 17 | 0.814 | 0.281 | 0.007 | 0.157 | -0.077 | -0.03 | | | | 2.471 |
| | (1.971)** | (1.061) | (0.096) | (1.397) | (-0.597) | (-0.447) | | | | (2.31) |
| 18 | 0.868 | 0.258 | -0.008 | 0.148 | -0.07 | -0.041 | -0.568 | | | 2.514 |
| | (2.099)** | (1.076) | (-0.102) | (1.33) | (-0.569) | (-0.6) | (1.662)* | | | (2.32) |
| 19 | 0.779 | 0.317 | 0.023 | 0.159 | -0.083 | -0.034 | | -7.049 | | 2.661 |
| | (1.893)* | (1.134) | (0.286) | (1.365) | (-0.639) | (-0.503) | | (-1.562) | | (2.468) |
| 20 | 0.791 | 0.304 | 0.013 | 0.168 | -0.087 | -0.031 | | | -21.831 | 2.574 |
| | (1.945)* | (1.119) | (0.159) | (1.435) | (-0.668) | (-0.445) | | | (-1.514) | (2.38) |
| 21 | 0.895 | 0.237 | -0.008 | 0.133 | -0.055 | -0.03 | -0.509 | -4.636 | | 2.588 |
| | (2.164)** | (1.016) | (-0.102) | (1.27) | (-0.459) | (-0.454) | (1.67)* | (1.751)* | | (2.362) |
| 22 | 0.888 | 0.241 | -0.011 | 0.148 | -0.068 | -0.034 | -0.482 | | -16.104 | 2.565 |
| | (2.135)** | (1.016) | (-0.138) | (1.321) | (-0.554) | (-0.506) | (-1.543) | | (-1.585) | (2.34) |
| 23 | 0.816 | 0.276 | 0.018 | 0.151 | -0.07 | -0.032 | | -5.274 | -16.191 | 2.66 |
| | (1.988)** | (1.088) | (0.217) | (1.37) | (-0.56) | (-0.476) | | (-1.579) | (-1.443) | (2.435) |
| 24 | 0.918 | 0.208 | -0.01 | 0.132 | -0.052 | -0.023 | -0.393 | -3.772 | -12.466 | 2.646 |
| | (2.184)** | (0.942) | (-0.13) | (1.252) | (-0.444) | (-0.36) | (-1.511) | (-1.641) | (-1.595) | (2.389) |

### 2.3.2 Newey-West t-statistics, controls

| # | $\hat{\lambda}_{\text{intercept}}$ | $\hat{\lambda}_{\beta_{MktRF}}$ | $\hat{\lambda}_{\beta_{SMB}}$ | $\hat{\lambda}_{\beta_{HML}}$ | $\hat{\lambda}_{\beta_{RMW}}$ | $\hat{\lambda}_{\beta_{CMA}}$ | $\hat{\lambda}_{\beta_{IINDvw}}$ | $\hat{\lambda}_{\beta_{MKTvw}}$ | $\hat{\lambda}_{\beta_{AIFIRMvw}}$ | $\hat{\lambda}_{\text{ln.BM}}$ | $\hat{\lambda}_{\text{ln.ME}}$ | $R^2$, $\bar{R}^2$ (in %) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.856 | 0.24 | | | | | | | | | | 1.674 |
| | (1.995)** | (0.875) | | | | | | | | | | (1.641) |
| 2 | 1.562 | 0.224 | | | | | -0.633 | | | | -0.123 | 2.337 |
| | (2.236)** | (0.89) | | | | | (-1.638) | | | | (1.991)** | (2.24) |
| 3 | 1.014 | 0.243 | | | | | -0.629 | | | 0.306 | | 2.045 |
| | (2.206)** | (1.004) | | | | | (1.693)* | | | (2.794)*** | | (1.948) |
| 4 | 1.448 | 0.238 | | | | | -0.599 | | | 0.225 | -0.085 | 2.617 |
| | (2.105)** | (0.982) | | | | | (-1.564) | | | (2.278)** | (-1.432) | (2.488) |
| 5 | 1.342 | 0.256 | | | | | | -7.588 | | 0.237 | -0.075 | 2.776 |
| | (2.013)** | (0.953) | | | | | | (-1.45) | | (2.402)** | (-1.322) | (2.647) |
| 6 | 1.412 | 0.237 | | | | | | | -3.273 | 0.23 | -0.081 | 2.694 |
| | (2.073)** | (0.956) | | | | | | | (-1.441) | (2.336)** | (-1.386) | (2.565) |
| 7 | 1.437 | 0.177 | | | | | -0.328 | -4.382 | | 0.225 | -0.075 | 2.726 |
| | (2.11)** | (0.8) | | | | | (-1.17) | (1.679)* | | (2.264)** | (-1.319) | (2.565) |
| 8 | 1.449 | 0.188 | | | | | -0.386 | | -2.395 | 0.225 | -0.078 | 2.701 |
| | (2.093)** | (0.855) | | | | | (-1.634) | | (-1.642) | (2.282)** | (-1.351) | (2.54) |
| 9 | 1.458 | 0.166 | | | | | | -4.286 | -1.787 | 0.228 | -0.077 | 2.769 |
| | (2.131)** | (0.747) | | | | | | (-1.499) | (-1.097) | (2.316)** | (-1.335) | (2.609) |
| 10 | 1.482 | 0.14 | | | | | -0.242 | -2.991 | -1.462 | 0.227 | -0.075 | 2.788 |
| | (2.144)** | (0.675) | | | | | (-1.149) | (-1.645) | (-1.295) | (2.297)** | (-1.32) | (2.596) |
| 11 | 0.838 | 0.289 | -0.002 | 0.142 | | | | | | | | 2.116 |
| | (2.031)** | (1.076) | (-0.028) | (1.246) | | | | | | | | (2.019) |
| 12 | 1.675 | 0.31 | -0.076 | 0.14 | | | -0.678 | | | | -0.143 | 2.758 |
| | (2.47)** | (1.296) | (-1.005) | (1.299) | | | (1.785)* | | | | (2.313)** | (2.597) |
| 13 | 1.025 | 0.272 | -0.025 | 0.073 | | | -0.623 | | | 0.294 | | 2.448 |
| | (2.295)** | (1.171) | (-0.305) | (0.721) | | | (1.712)* | | | (2.717)*** | | (2.287) |
| 14 | 1.566 | 0.296 | -0.063 | 0.106 | | | -0.624 | | | 0.19 | -0.107 | 2.982 |
| | (2.352)** | (1.253) | (-0.874) | (1.069) | | | (1.654)* | | | (2.072)** | (1.843)* | (2.789) |
| 15 | 1.486 | 0.309 | -0.038 | 0.131 | | | | -7.638 | | 0.205 | -0.098 | 3.127 |
| | (2.278)** | (1.149) | (-0.513) | (1.214) | | | | (-1.435) | | (2.218)** | (1.724)* | (2.935) |
| 16 | 1.528 | 0.284 | -0.045 | 0.106 | | | | | -2.969 | 0.202 | -0.101 | 3.057 |
| | (2.325)** | (1.164) | (-0.611) | (1.062) | | | | | (-1.303) | (2.193)** | (1.769)* | (2.865) |
| 17 | 1.585 | 0.231 | -0.058 | 0.096 | | | -0.38 | -4.417 | | 0.196 | -0.098 | 3.073 |
| | (2.381)** | (1.074) | (-0.797) | (1.001) | | | (-1.396) | (1.683)* | | (2.147)** | (1.746)* | (2.849) |
| 18 | 1.57 | 0.237 | -0.057 | 0.087 | | | -0.372 | | -2.147 | 0.198 | -0.099 | 3.036 |
| | (2.35)** | (1.112) | (-0.778) | (0.913) | | | (1.657)* | | (-1.506) | (2.157)** | (1.745)* | (2.811) |
| 19 | 1.584 | 0.217 | -0.05 | 0.095 | | | | -4.538 | -1.639 | 0.202 | -0.097 | 3.124 |
| | (2.38)** | (0.987) | (-0.674) | (0.999) | | | | (-1.524) | (-0.974) | (2.19)** | (1.712)* | (2.899) |
| 20 | 1.607 | 0.19 | -0.055 | 0.08 | | | -0.27 | -3.117 | -1.411 | 0.2 | -0.096 | 3.121 |
| | (2.385)** | (0.943) | (-0.761) | (0.871) | | | (-1.358) | (1.675)* | (-1.263) | (2.171)** | (1.702)* | (2.865) |
| 21 | 0.814 | 0.281 | 0.007 | 0.157 | -0.077 | -0.03 | | | | | | 2.471 |
| | (1.971)** | (1.061) | (0.096) | (1.397) | (-0.597) | (-0.447) | | | | | | (2.31) |
| 22 | 1.65 | 0.289 | -0.066 | 0.142 | -0.038 | -0.027 | -0.716 | | | | -0.138 | 3.045 |
| | (2.455)** | (1.25) | (-0.956) | (1.376) | (-0.318) | (-0.42) | (1.923)* | | | | (2.321)** | (2.821) |
| 23 | 1.024 | 0.254 | -0.021 | 0.084 | -0.077 | -0.051 | -0.666 | | | 0.289 | | 2.769 |
| | (2.297)** | (1.135) | (-0.27) | (0.863) | (-0.655) | (-0.789) | (1.856)* | | | (2.79)*** | | (2.544) |
| 24 | 1.554 | 0.279 | -0.058 | 0.109 | -0.052 | -0.036 | -0.654 | | | 0.192 | -0.103 | 3.263 |
| | (2.349)** | (1.222) | (-0.85) | (1.15) | (-0.466) | (-0.585) | (1.768)* | | | (2.165)** | (1.851)* | (3.007) |
| 25 | 1.468 | 0.318 | -0.037 | 0.135 | -0.063 | -0.027 | | -7.759 | | 0.207 | -0.097 | 3.409 |
| | (2.259)** | (1.184) | (-0.53) | (1.283) | (-0.541) | (-0.434) | | (-1.425) | | (2.305)** | (1.764)* | (3.153) |
| 26 | 1.535 | 0.27 | -0.044 | 0.108 | -0.052 | -0.039 | | | -2.644 | 0.202 | -0.1 | 3.315 |
| | (2.344)** | (1.147) | (-0.63) | (1.131) | (-0.469) | (-0.625) | | | (-1.216) | (2.266)** | (1.816)* | (3.059) |
| 27 | 1.577 | 0.226 | -0.056 | 0.098 | -0.035 | -0.025 | -0.436 | -4.385 | | 0.2 | -0.096 | 3.343 |
| | (2.376)** | (1.064) | (-0.835) | (1.078) | (-0.324) | (-0.435) | (-1.528) | (-1.628) | | (2.243)** | (1.76)* | (3.055) |
| 28 | 1.574 | 0.225 | -0.053 | 0.088 | -0.035 | -0.038 | -0.42 | | -1.956 | 0.201 | -0.098 | 3.283 |
| | (2.354)** | (1.089) | (-0.786) | (0.966) | (-0.335) | (-0.628) | (1.883)* | | (-1.432) | (2.246)** | (1.774)* | (2.995) |
| 29 | 1.584 | 0.21 | -0.051 | 0.101 | -0.028 | -0.03 | | -4.432 | -1.502 | 0.205 | -0.096 | 3.383 |
| | (2.385)** | (0.979) | (-0.734) | (1.112) | (-0.265) | (-0.515) | | (-1.506) | (-0.896) | (2.273)** | (1.747)* | (3.095) |
| 30 | 1.606 | 0.18 | -0.053 | 0.082 | -0.018 | -0.031 | -0.314 | -3.017 | -1.266 | 0.204 | -0.095 | 3.369 |
| | (2.382)** | (0.912) | (-0.792) | (0.938) | (-0.18) | (-0.549) | (-1.557) | (-1.626) | (-1.135) | (2.262)** | (1.718)* | (3.049) |

| # | $\hat{\lambda}_{\text{intercept}}$ | $\hat{\lambda}_{\beta_{MktRF}}$ | $\hat{\lambda}_{\beta_{SMB}}$ | $\hat{\lambda}_{\beta_{HML}}$ | $\hat{\lambda}_{\beta_{RMW}}$ | $\hat{\lambda}_{\beta_{CMA}}$ | $\hat{\lambda}_{\beta_{IINDew}}$ | $\hat{\lambda}_{\beta_{MKTew}}$ | $\hat{\lambda}_{\beta_{AIFIRMew}}$ | $\hat{\lambda}_{\text{ln.BM}}$ | $\hat{\lambda}_{\text{ln.ME}}$ | $R^2$, $\bar{R}^2$ (in %) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.856 | 0.24 | | | | | | | | | | 1.674 |
| | (1.995)** | (0.875) | | | | | | | | | | (1.641) |
| 2 | 1.548 | 0.241 | | | | | -0.572 | | | | -0.123 | 2.39 |
| | (2.223)** | (0.912) | | | | | (-1.521) | | | | (1.999)** | (2.293) |
| 3 | 1.005 | 0.262 | | | | | -0.572 | | | 0.313 | | 2.099 |
| | (2.184)** | (1.022) | | | | | (-1.541) | | | (2.855)*** | | (2.002) |
| 4 | 1.435 | 0.253 | | | | | -0.551 | | | 0.233 | -0.084 | 2.668 |
| | (2.094)** | (0.99) | | | | | (-1.467) | | | (2.368)** | (-1.429) | (2.54) |
| 5 | 1.337 | 0.279 | | | | | | -6.312 | | 0.236 | -0.077 | 2.786 |
| | (2.019)** | (1.003) | | | | | | (-1.468) | | (2.393)** | (-1.363) | (2.657) |
| 6 | 1.367 | 0.297 | | | | | | | -22.378 | 0.238 | -0.081 | 2.745 |
| | (2.02)** | (1.07) | | | | | | | (-1.537) | (2.438)** | (-1.382) | (2.617) |
| 7 | 1.423 | 0.221 | | | | | -0.468 | -4.057 | | 0.229 | -0.08 | 2.758 |
| | (2.101)** | (0.914) | | | | | (-1.466) | (-1.557) | | (2.323)** | (-1.393) | (2.597) |
| 8 | 1.433 | 0.258 | | | | | -0.482 | | -17.972 | 0.233 | -0.084 | 2.788 |
| | (2.082)** | (1.019) | | | | | (-1.386) | | (-1.631) | (2.364)** | (-1.418) | (2.627) |
| 9 | 1.387 | 0.268 | | | | | | -4.792 | -15.865 | 0.235 | -0.081 | 2.834 |
| | (2.062)** | (1.04) | | | | | | (-1.469) | (-1.419) | (2.426)** | (-1.41) | (2.674) |
| 10 | 1.44 | 0.231 | | | | | -0.385 | -3.548 | -13.267 | 0.227 | -0.082 | 2.875 |
| | (2.098)** | (0.984) | | | | | (-1.359) | (-1.497) | (-1.62) | (2.319)** | (-1.429) | (2.682) |
| 11 | 0.838 | 0.289 | -0.002 | 0.142 | | | | | | | | 2.116 |
| | (2.031)** | (1.076) | (-0.028) | (1.246) | | | | | | | | (2.019) |
| 12 | 1.66 | 0.322 | -0.076 | 0.151 | | | -0.588 | | | | -0.142 | 2.782 |
| | (2.452)** | (1.272) | (-1.009) | (1.348) | | | (-1.554) | | | | (2.31)** | (2.621) |
| 13 | 1.018 | 0.285 | -0.025 | 0.083 | | | -0.578 | | | 0.299 | | 2.476 |
| | (2.272)** | (1.156) | (-0.297) | (0.784) | | | (-1.568) | | | (2.758)*** | | (2.315) |
| 14 | 1.551 | 0.307 | -0.064 | 0.115 | | | -0.564 | | | 0.197 | -0.105 | 3.006 |
| | (2.336)** | (1.228) | (-0.888) | (1.113) | | | (-1.502) | | | (2.148)** | (1.826)* | (2.813) |
| 15 | 1.467 | 0.336 | -0.036 | 0.128 | | | | -6.417 | | 0.208 | -0.099 | 3.144 |
| | (2.268)** | (1.201) | (-0.474) | (1.186) | | | | (-1.468) | | (2.281)** | (1.742)* | (2.951) |
| 16 | 1.477 | 0.339 | -0.043 | 0.135 | | | | | -20.015 | 0.206 | -0.101 | 3.082 |
| | (2.242)** | (1.221) | (-0.582) | (1.252) | | | | | (-1.393) | (2.237)** | (1.735)* | (2.89) |
| 17 | 1.558 | 0.278 | -0.062 | 0.1 | | | -0.494 | -4.281 | | 0.207 | -0.1 | 3.07 |
| | (2.349)** | (1.156) | (-0.853) | (1.02) | | | (-1.512) | (-1.6) | | (2.269)** | (1.763)* | (2.845) |
| 18 | 1.554 | 0.288 | -0.063 | 0.11 | | | -0.464 | | -15.114 | 0.209 | -0.1 | 3.088 |
| | (2.314)** | (1.174) | (-0.853) | (1.066) | | | (-1.391) | | (-1.453) | (2.28)** | (1.742)* | (2.864) |
| 19 | 1.494 | 0.304 | -0.037 | 0.119 | | | | -4.747 | -14 | 0.208 | -0.099 | 3.167 |
| | (2.275)** | (1.18) | (-0.489) | (1.173) | | | | (-1.461) | (-1.267) | (2.269)** | (1.724)* | (2.943) |
| 20 | 1.579 | 0.249 | -0.062 | 0.096 | | | -0.372 | -3.422 | -11.042 | 0.208 | -0.099 | 3.159 |
| | (2.341)** | (1.102) | (-0.845) | (0.983) | | | (-1.364) | (-1.495) | (-1.406) | (2.286)** | (1.734)* | (2.903) |
| 21 | 0.814 | 0.281 | 0.007 | 0.157 | -0.077 | -0.03 | | | | | | 2.471 |
| | (1.971)** | (1.061) | (0.096) | (1.397) | (-0.597) | (-0.447) | | | | | | (2.31) |
| 22 | 1.648 | 0.297 | -0.069 | 0.158 | -0.038 | -0.031 | -0.534 | | | | -0.138 | 3.067 |
| | (2.45)** | (1.234) | (-0.989) | (1.455) | (-0.324) | (-0.47) | (-1.527) | | | | (2.333)** | (2.842) |
| 23 | 1.027 | 0.261 | -0.023 | 0.099 | -0.079 | -0.055 | -0.529 | | | 0.295 | | 2.796 |
| | (2.295)** | (1.118) | (-0.295) | (0.96) | (-0.672) | (-0.832) | (-1.547) | | | (2.837)*** | | (2.571) |
| 24 | 1.554 | 0.285 | -0.061 | 0.123 | -0.053 | -0.04 | -0.51 | | | 0.199 | -0.102 | 3.285 |
| | (2.347)** | (1.2) | (-0.896) | (1.225) | (-0.47) | (-0.633) | (-1.47) | | | (2.24)** | (1.849)* | (3.029) |
| 25 | 1.447 | 0.344 | -0.034 | 0.132 | -0.07 | -0.035 | | -6.571 | | 0.212 | -0.097 | 3.425 |
| | (2.244)** | (1.233) | (-0.484) | (1.244) | (-0.586) | (-0.55) | | (-1.457) | | (2.372)** | (1.772)* | (3.169) |
| 26 | 1.455 | 0.333 | -0.042 | 0.144 | -0.07 | -0.031 | | | -19.05 | 0.212 | -0.098 | 3.355 |
| | (2.223)** | (1.223) | (-0.596) | (1.349) | (-0.588) | (-0.472) | | | (-1.295) | (2.361)** | (1.74)* | (3.1) |
| 27 | 1.565 | 0.266 | -0.061 | 0.107 | -0.04 | -0.032 | -0.457 | -4.208 | | 0.208 | -0.099 | 3.348 |
| | (2.355)** | (1.144) | (-0.927) | (1.13) | (-0.37) | (-0.517) | (-1.464) | (-1.595) | | (2.332)** | (1.797)* | (3.06) |
| 28 | 1.557 | 0.271 | -0.062 | 0.123 | -0.051 | -0.034 | -0.435 | | -13.989 | 0.211 | -0.099 | 3.339 |
| | (2.329)** | (1.146) | (-0.908) | (1.221) | (-0.459) | (-0.532) | (-1.365) | | (-1.338) | (2.364)** | (1.775)* | (3.052) |
| 29 | 1.482 | 0.306 | -0.039 | 0.126 | -0.054 | -0.033 | | -4.894 | -13.695 | 0.213 | -0.098 | 3.421 |
| | (2.264)** | (1.211) | (-0.537) | (1.27) | (-0.48) | (-0.532) | | (-1.466) | (-1.184) | (2.36)** | (1.755)* | (3.134) |
| 30 | 1.582 | 0.24 | -0.061 | 0.108 | -0.037 | -0.025 | -0.35 | -3.429 | -10.357 | 0.211 | -0.099 | 3.404 |
| | (2.35)** | (1.093) | (-0.916) | (1.13) | (-0.347) | (-0.416) | (-1.309) | (-1.501) | (-1.276) | (2.372)** | (1.768)* | (3.084) |

# 3 Testing hypothesis 3, $\lambda_{IIND} = 0$

## 3.1 SIC-49 industries

### 3.1.1 Newey-West t-statistics

| # | $\hat{\lambda}_{\text{intercept}}$ | $\hat{\lambda}_{\beta_{MktRF}}$ | $\hat{\lambda}_{\beta_{SMB}}$ | $\hat{\lambda}_{\beta_{HML}}$ | $\hat{\lambda}_{\beta_{RMW}}$ | $\hat{\lambda}_{\beta_{CMA}}$ | $\hat{\lambda}_{\beta_{INDvw}}$ | $\hat{\lambda}_{\text{IINDvw}}$ | $\hat{\lambda}_{\beta_{MKTvw}}$ | $\hat{\lambda}_{\beta_{FIRMvw}}$ | $\hat{\lambda}_{\text{IFIRMvw}}$ | $R^2$, $\bar{R}^2$ (in %) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.896 | -0.104 | | | | | | | | | | 1.595 |
| | (4.48)*** | (-0.817) | | | | | | | | | | (1.569) |
| 2 | 0.853 | -0.073 | | | | | -0.966 | | | | | 1.896 |
| | (4.197)*** | (-0.558) | | | | | (1.733)* | | | | | (1.842) |
| 3 | 0.937 | -0.098 | | | | | | -0.008 | | | | 1.859 |
| | (4.69)*** | (-0.785) | | | | | | (2.13)** | | | | (1.805) |
| 4 | 0.898 | -0.067 | | | | | -0.953 | -0.008 | | | | 2.153 |
| | (4.438)*** | (-0.521) | | | | | (1.748)* | (2.203)** | | | | (2.073) |
| 5 | 0.837 | -0.1 | | | | | -0.887 | | -3.271 | -2.813 | | 2.427 |
| | (4.225)*** | (-0.814) | | | | | (1.742)* | | (2.046)** | (2.103)** | | (2.321) |
| 6 | 0.886 | -0.074 | | | | | | -0.008 | -3.587 | -3.094 | | 2.496 |
| | (4.472)*** | (-0.597) | | | | | | (2.263)** | (2.118)** | (2.223)** | | (2.39) |
| 7 | 0.881 | -0.095 | | | | | -0.874 | -0.008 | -3.23 | -2.769 | | 2.666 |
| | (4.451)*** | (-0.785) | | | | | (1.757)* | (2.2)** | (2.071)** | (2.128)** | | (2.533) |
| 8 | 0.846 | -0.037 | | | | | -1.022 | | | | 0 | 2.628 |
| | (4.234)*** | (-0.29) | | | | | (1.857)* | | | | (2.477)** | (2.548) |
| 9 | 0.931 | -0.063 | | | | | | -0.008 | | | 0 | 2.611 |
| | (4.708)*** | (-0.527) | | | | | | (2.145)** | | | (2.42)** | (2.531) |
| 10 | 0.894 | -0.032 | | | | | -1.009 | -0.008 | | | 0 | 2.869 |
| | (4.47)*** | (-0.258) | | | | | (1.877)* | (2.218)** | | | (2.48)** | (2.764) |
| 11 | 0.83 | -0.056 | | | | | -1.011 | | | -3.303 | 0 | 2.857 |
| | (4.175)*** | (-0.447) | | | | | (1.888)* | | | (2.305)** | (2.669)*** | (2.751) |
| 12 | 0.882 | -0.029 | | | | | | -0.008 | | -3.514 | 0 | 2.884 |
| | (4.46)*** | (-0.228) | | | | | | (2.178)** | | (2.388)** | (2.595)*** | (2.778) |
| 13 | 0.874 | -0.051 | | | | | -1.001 | -0.008 | | -3.271 | 0 | 3.09 |
| | (4.408)*** | (-0.417) | | | | | (1.91)* | (2.125)** | | (2.341)** | (2.669)*** | (2.958) |
| 14 | 0.827 | -0.065 | | | | | -0.951 | | -3.448 | -3.016 | 0 | 3.072 |
| | (4.22)*** | (-0.545) | | | | | (1.887)* | | (2.175)** | (2.281)** | (2.842)*** | (2.94) |
| 15 | 0.878 | -0.039 | | | | | | -0.008 | -3.767 | -3.284 | 0 | 3.144 |
| | (4.471)*** | (-0.318) | | | | | | (2.263)** | (2.246)** | (2.393)** | (2.887)*** | (3.012) |
| 16 | 0.874 | -0.061 | | | | | -0.939 | -0.008 | -3.403 | -2.971 | 0 | 3.3 |
| | (4.448)*** | (-0.518) | | | | | (1.909)* | (2.204)** | (2.203)** | (2.314)** | (2.841)*** | (3.142) |
| 17 | 0.827 | -0.083 | -0.014 | 0.147 | | | | | | | | 2.753 |
| | (4.3)*** | (-0.762) | (-0.194) | (2.34)** | | | | | | | | (2.674) |
| 18 | 0.873 | -0.082 | -0.012 | 0.146 | | | | -0.007 | | | | 2.976 |
| | (4.53)*** | (-0.771) | (-0.169) | (2.348)** | | | | (2.077)** | | | | (2.87) |
| 19 | 0.834 | -0.041 | -0.005 | 0.14 | | | -0.863 | -0.007 | | | | 3.185 |
| | (4.291)*** | (-0.371) | (-0.07) | (2.24)** | | | (1.671)* | (2.085)** | | | | (3.053) |
| 20 | 0.793 | -0.061 | -0.004 | 0.144 | | | -0.826 | | -3.197 | -2.65 | | 3.273 |
| | (4.109)*** | (-0.571) | (-0.057) | (2.356)** | | | (1.713)* | | (2.123)** | (2.085)** | | (3.115) |
| 21 | 0.825 | -0.044 | 0.001 | 0.141 | | | | -0.007 | -3.537 | -2.905 | | 3.341 |
| | (4.262)*** | (-0.406) | (0.02) | (2.294)** | | | | (2.099)** | (2.102)** | (2.126)** | | (3.183) |
| 22 | 0.837 | -0.061 | -0.002 | 0.143 | | | -0.813 | -0.007 | -3.153 | -2.607 | | 3.482 |
| | (4.316)*** | (-0.581) | (-0.029) | (2.361)** | | | (1.727)* | (2.04)** | (2.145)** | (2.108)** | | (3.298) |
| 23 | 0.789 | -0.021 | 0.013 | 0.133 | | | -0.921 | | | | 0 | 3.501 |
| | (4.107)*** | (-0.189) | (0.192) | (2.146)** | | | (1.762)* | | | | (2.896)*** | (3.37) |
| 24 | 0.874 | -0.06 | 0.008 | 0.139 | | | | -0.007 | | | 0 | 3.517 |
| | (4.567)*** | (-0.568) | (0.113) | (2.276)** | | | | (2.085)** | | | (2.855)*** | (3.386) |
| 25 | 0.836 | -0.021 | 0.015 | 0.132 | | | -0.908 | -0.007 | | | 0 | 3.714 |
| | (4.335)*** | (-0.189) | (0.227) | (2.144)** | | | (1.778)* | (2.09)** | | | (2.897)*** | (3.557) |
| 26 | 0.787 | -0.032 | 0.016 | 0.14 | | | -0.952 | | | -3.143 | 0 | 3.66 |
| | (4.098)*** | (-0.292) | (0.233) | (2.259)** | | | (1.833)* | | | (2.257)** | (2.925)*** | (3.503) |
| 27 | 0.828 | -0.019 | 0.022 | 0.135 | | | | -0.007 | | -3.249 | 0 | 3.721 |
| | (4.316)*** | (-0.175) | (0.317) | (2.185)** | | | | (2.08)** | | (2.263)** | (2.94)*** | (3.564) |
| 28 | 0.832 | -0.032 | 0.018 | 0.139 | | | -0.939 | -0.007 | | -3.104 | 0 | 3.868 |
| | (4.323)*** | (-0.294) | (0.266) | (2.26)** | | | (1.851)* | (2.053)** | | (2.287)** | (2.927)*** | (3.684) |
| 29 | 0.792 | -0.041 | 0.017 | 0.136 | | | -0.874 | | -3.317 | -2.803 | 0 | 3.79 |
| | (4.132)*** | (-0.387) | (0.241) | (2.262)** | | | (1.83)* | | (2.223)** | (2.233)** | (2.958)*** | (3.606) |
| 30 | 0.827 | -0.023 | 0.022 | 0.133 | | | | -0.007 | -3.659 | -3.055 | 0 | 3.861 |
| | (4.297)*** | (-0.219) | (0.326) | (2.199)** | | | | (2.109)** | (2.199)** | (2.27)** | (3.009)*** | (3.678) |
| 31 | 0.838 | -0.041 | 0.019 | 0.136 | | | -0.861 | -0.007 | -3.271 | -2.76 | 0 | 3.994 |
| | (4.346)*** | (-0.397) | (0.272) | (2.269)** | | | (1.851)* | (2.058)** | (2.249)** | (2.264)** | (2.959)*** | (3.784) |
| 32 | 0.811 | -0.068 | -0.012 | 0.142 | -0.009 | 0.077 | | | | | | 3.098 |
| | (4.206)*** | (-0.632) | (-0.166) | (2.318)** | (-0.188) | (1.802)* | | | | | | (2.966) |
| 33 | 0.857 | -0.069 | -0.01 | 0.142 | -0.009 | 0.076 | | -0.007 | | | | 3.307 |
| | (4.444)*** | (-0.656) | (-0.138) | (2.333)** | (-0.197) | (1.807)* | | (2.003)** | | | | (3.149) |
| 34 | 0.822 | -0.034 | -0.001 | 0.141 | -0.019 | 0.072 | -0.895 | -0.007 | | | | 3.484 |
| | (4.242)*** | (-0.314) | (-0.01) | (2.311)** | (-0.41) | (1.705)* | (1.681)* | (2.011)** | | | | (3.3) |
| 35 | 0.785 | -0.049 | -0.005 | 0.14 | -0.01 | 0.076 | -0.837 | | -3.245 | -2.706 | | 3.537 |
| | (4.049)*** | (-0.46) | (-0.071) | (2.371)** | (-0.225) | (1.863)* | (1.668)* | | (2.084)** | (2.064)** | | (3.327) |
| 36 | 0.818 | -0.036 | 0.001 | 0.139 | -0.014 | 0.069 | | -0.007 | -3.516 | -2.879 | | 3.623 |
| | (4.229)*** | (-0.337) | (0.017) | (2.343)** | (-0.325) | (1.701)* | | (2.026)** | (2.077)** | (2.069)** | | (3.412) |
| 37 | 0.828 | -0.05 | -0.003 | 0.14 | -0.01 | 0.075 | -0.823 | -0.007 | -3.195 | -2.658 | | 3.737 |
| | (4.27)*** | (-0.481) | (-0.04) | (2.382)** | (-0.231) | (1.863)* | (1.682)* | (1.983)** | (2.105)** | (2.087)** | | (3.501) |
| 38 | 0.775 | -0.013 | 0.015 | 0.134 | -0.025 | 0.069 | -0.961 | | | | 0 | 3.792 |
| | (4.022)*** | (-0.121) | (0.228) | (2.213)** | (-0.554) | (1.621) | (1.776)* | | | | (2.795)*** | (3.608) |
| 39 | 0.856 | -0.049 | 0.01 | 0.135 | -0.015 | 0.073 | | -0.007 | | | 0 | 3.824 |
| | (4.469)*** | (-0.466) | (0.144) | (2.25)** | (-0.353) | (1.739)* | | (2.037)** | | | (2.802)*** | (3.641) |
| 40 | 0.822 | -0.015 | 0.018 | 0.134 | -0.026 | 0.068 | -0.947 | -0.007 | | | 0 | 3.994 |
| | (4.267)*** | (-0.134) | (0.266) | (2.219)** | (-0.572) | (1.62) | (1.794)* | (2.039)** | | | (2.803)*** | (3.784) |
| 41 | 0.774 | -0.02 | 0.015 | 0.137 | -0.022 | 0.071 | -0.979 | | | -3.226 | 0 | 3.922 |
| | (4.013)*** | (-0.177) | (0.228) | (2.275)** | (-0.503) | (1.685)* | (1.826)* | | | (2.265)** | (2.818)*** | (3.713) |
| 42 | 0.814 | -0.01 | 0.021 | 0.137 | -0.028 | 0.068 | | -0.007 | | -3.295 | 0 | 3.999 |
| | (4.244)*** | (-0.086) | (0.312) | (2.259)** | (-0.624) | (1.623) | | (2.05)** | | (2.231)** | (2.846)*** | (3.79) |
| 43 | 0.82 | -0.02 | 0.018 | 0.137 | -0.023 | 0.071 | -0.965 | -0.007 | | -3.182 | 0 | 4.121 |
| | (4.256)*** | (-0.19) | (0.267) | (2.284)** | (-0.518) | (1.689)* | (1.844)* | (2.035)** | | (2.295)** | (2.825)*** | (3.885) |
| 44 | 0.782 | -0.03 | 0.013 | 0.133 | -0.016 | 0.072 | -0.883 | | -3.348 | -2.847 | 0 | 4.039 |
| | (4.063)*** | (-0.285) | (0.187) | (2.277)** | (-0.372) | (1.768)* | (1.776)* | | (2.165)** | (2.196)** | (2.831)*** | (3.803) |
| 45 | 0.817 | -0.017 | 0.019 | 0.132 | -0.02 | 0.065 | | -0.007 | -3.626 | -3.024 | 0 | 4.125 |
| | (4.249)*** | (-0.155) | (0.291) | (2.253)** | (-0.479) | (1.615) | | (2.061)** | (2.162)** | (2.202)** | (2.898)*** | (3.889) |
| 46 | 0.828 | -0.032 | 0.015 | 0.133 | -0.016 | 0.071 | -0.869 | -0.007 | -3.296 | -2.798 | 0 | 4.234 |
| | (4.293)*** | (-0.304) | (0.223) | (2.291)** | (-0.383) | (1.769)* | (1.796)* | (2.026)** | (2.19)** | (2.226)** | (2.837)*** | (3.973) |

| # | $\hat{\lambda}_{\text{intercept}}$ | $\hat{\lambda}_{\beta_{MktRF}}$ | $\hat{\lambda}_{\beta_{SMB}}$ | $\hat{\lambda}_{\beta_{HML}}$ | $\hat{\lambda}_{\beta_{RMW}}$ | $\hat{\lambda}_{\beta_{CMA}}$ | $\hat{\lambda}_{\beta_{INDew}}$ | $\hat{\lambda}_{\text{IINDew}}$ | $\hat{\lambda}_{\beta_{MKTew}}$ | $\hat{\lambda}_{\beta_{FIRMew}}$ | $\hat{\lambda}_{\text{IFIRMew}}$ | $R^2$, $\bar{R}^2$ (in %) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.896 | -0.104 | | | | | | | | | | 1.595 |
| | (4.48)*** | (-0.817) | | | | | | | | | | (1.569) |
| 2 | 0.839 | -0.05 | | | | | -0.925 | | | | | 1.896 |
| | (4.172)*** | (-0.387) | | | | | (2.089)** | | | | | (1.842) |
| 3 | 0.9 | -0.089 | | | | | | -0.004 | | | | 1.91 |
| | (4.494)*** | (-0.706) | | | | | | (-0.864) | | | | (1.856) |
| 4 | 0.844 | -0.038 | | | | | -0.916 | -0.004 | | | | 2.193 |
| | (4.194)*** | (-0.295) | | | | | (2.055)** | (-0.84) | | | | (2.113) |
| 5 | 0.832 | -0.038 | | | | | -0.803 | | -2.355 | -13.427 | | 2.477 |
| | (4.149)*** | (-0.31) | | | | | (2.115)** | | (2.099)** | (2.818)*** | | (2.371) |
| 6 | 0.837 | -0.029 | | | | | | -0.004 | -2.42 | -14.097 | | 2.508 |
| | (4.136)*** | (-0.238) | | | | | | (-0.861) | (2.102)** | (2.978)*** | | (2.402) |
| 7 | 0.835 | -0.028 | | | | | -0.796 | -0.004 | -2.38 | -13.34 | | 2.746 |
| | (4.149)*** | (-0.232) | | | | | (2.088)** | (-0.841) | (2.122)** | (2.794)*** | | (2.614) |
| 8 | 0.829 | -0.015 | | | | | -0.927 | | | | 0 | 2.613 |
| | (4.196)*** | (-0.119) | | | | | (2.111)** | | | | (2.415)** | (2.534) |
| 9 | 0.891 | -0.054 | | | | | | -0.004 | | | 0 | 2.645 |
| | (4.496)*** | (-0.444) | | | | | | (-0.807) | | | (2.423)** | (2.565) |
| 10 | 0.836 | -0.004 | | | | | -0.919 | -0.004 | | | 0 | 2.895 |
| | (4.199)*** | (-0.03) | | | | | (2.075)** | (-0.791) | | | (2.427)** | (2.789) |
| 11 | 0.811 | -0.005 | | | | | -0.89 | | | -14.731 | 0 | 2.865 |
| | (4.099)*** | (-0.042) | | | | | (2.06)** | | | (2.645)*** | (2.406)** | (2.759) |
| 12 | 0.824 | 0.012 | | | | | | -0.004 | | -14.721 | 0 | 2.909 |
| | (4.169)*** | (0.099) | | | | | | (-0.825) | | (2.702)*** | (2.444)** | (2.803) |
| 13 | 0.818 | 0.005 | | | | | -0.882 | -0.004 | | -14.65 | 0 | 3.135 |
| | (4.109)*** | (0.038) | | | | | (2.027)** | (-0.803) | | (2.617)*** | (2.417)** | (3.003) |
| 14 | 0.817 | -0.009 | | | | | -0.812 | | -2.499 | -13.237 | 0 | 3.107 |
| | (4.131)*** | (-0.076) | | | | | (2.152)** | | (2.245)** | (2.814)*** | (2.402)** | (2.975) |
| 15 | 0.825 | 0.001 | | | | | | -0.004 | -2.556 | -13.831 | 0 | 3.159 |
| | (4.12)*** | (0.01) | | | | | | (-0.848) | (2.24)** | (2.963)*** | (2.475)** | (3.027) |
| 16 | 0.824 | 0 | | | | | -0.805 | -0.004 | -2.522 | -13.152 | 0 | 3.366 |
| | (4.126)*** | (0.001) | | | | | (2.123)** | (-0.84) | (2.263)** | (2.789)*** | (2.406)** | (3.207) |
| 17 | 0.827 | -0.083 | -0.014 | 0.147 | | | | | | | | 2.753 |
| | (4.3)*** | (-0.762) | (-0.194) | (2.34)** | | | | | | | | (2.674) |
| 18 | 0.832 | -0.072 | -0.013 | 0.14 | | | | -0.003 | | | | 3.027 |
| | (4.294)*** | (-0.666) | (-0.176) | (2.256)** | | | | (-0.735) | | | | (2.921) |
| 19 | 0.776 | -0.024 | 0.006 | 0.128 | | | -0.864 | -0.003 | | | | 3.22 |
| | (4.009)*** | (-0.215) | (0.08) | (2.036)** | | | (2.082)** | (-0.722) | | | | (3.089) |
| 20 | 0.772 | -0.034 | 0.007 | 0.131 | | | -0.735 | | -2.237 | -12.905 | | 3.321 |
| | (3.988)*** | (-0.32) | (0.095) | (2.148)** | | | (2.137)** | | (2.189)** | (3)*** | | (3.163) |
| 21 | 0.779 | -0.024 | 0.005 | 0.132 | | | | -0.003 | -2.313 | -13.44 | | 3.41 |
| | (3.977)*** | (-0.226) | (0.068) | (2.156)** | | | | (-0.693) | (2.132)** | (3.023)*** | | (3.252) |
| 22 | 0.777 | -0.025 | 0.008 | 0.126 | | | -0.731 | -0.003 | -2.264 | -12.874 | | 3.568 |
| | (3.971)*** | (-0.241) | (0.116) | (2.084)** | | | (2.118)** | (-0.672) | (2.215)** | (2.986)*** | | (3.384) |
| 23 | 0.769 | -0.011 | 0.024 | 0.126 | | | -0.875 | | | | 0 | 3.491 |
| | (4.051)*** | (-0.097) | (0.346) | (2.017)** | | | (2.135)** | | | | (2.844)*** | (3.359) |
| 24 | 0.831 | -0.049 | 0.007 | 0.133 | | | | -0.003 | | | 0 | 3.562 |
| | (4.32)*** | (-0.459) | (0.105) | (2.177)** | | | | (-0.692) | | | (2.838)*** | (3.431) |
| 25 | 0.777 | -0.002 | 0.026 | 0.12 | | | -0.87 | -0.003 | | | 0 | 3.749 |
| | (4.035)*** | (-0.016) | (0.376) | (1.944)* | | | (2.106)** | (-0.686) | | | (2.849)*** | (3.591) |
| 26 | 0.764 | -0.01 | 0.026 | 0.125 | | | -0.818 | | | -13.933 | 0 | 3.671 |
| | (4.025)*** | (-0.091) | (0.376) | (2.048)** | | | (2.091)** | | | (2.812)*** | (2.83)*** | (3.514) |
| 27 | 0.77 | 0.007 | 0.023 | 0.124 | | | | -0.003 | | -14.601 | 0 | 3.759 |
| | (4.017)*** | (0.065) | (0.334) | (2.001)** | | | | (-0.702) | | (2.734)*** | (2.863)*** | (3.601) |
| 28 | 0.772 | -0.001 | 0.028 | 0.121 | | | -0.813 | -0.003 | | -13.905 | 0 | 3.919 |
| | (4.008)*** | (-0.012) | (0.409) | (1.992)** | | | (2.064)** | (-0.686) | | (2.793)*** | (2.832)*** | (3.736) |
| 29 | 0.771 | -0.014 | 0.026 | 0.124 | | | -0.741 | | -2.354 | -12.547 | 0 | 3.833 |
| | (4.014)*** | (-0.132) | (0.377) | (2.068)** | | | (2.162)** | | (2.318)** | (2.945)*** | (2.813)*** | (3.649) |
| 30 | 0.78 | -0.003 | 0.025 | 0.125 | | | | -0.003 | -2.426 | -13.074 | 0 | 3.925 |
| | (4)*** | (-0.026) | (0.36) | (2.078)** | | | | (-0.664) | (2.256)** | (2.973)*** | (2.854)*** | (3.742) |
| 31 | 0.779 | -0.006 | 0.028 | 0.12 | | | -0.737 | -0.003 | -2.378 | -12.521 | 0 | 4.074 |
| | (3.994)*** | (-0.055) | (0.406) | (2.007)** | | | (2.143)** | (-0.654) | (2.34)** | (2.932)*** | (2.812)*** | (3.864) |
| 32 | 0.811 | -0.068 | -0.012 | 0.142 | -0.009 | 0.077 | | | | | | 3.098 |
| | (4.206)*** | (-0.632) | (-0.166) | (2.318)** | (-0.188) | (1.802)* | | | | | | (2.966) |
| 33 | 0.814 | -0.059 | -0.01 | 0.136 | -0.009 | 0.072 | | -0.003 | | | | 3.35 |
| | (4.189)*** | (-0.549) | (-0.134) | (2.244)** | (-0.186) | (1.707)* | | (-0.586) | | | | (3.192) |
| 34 | 0.765 | -0.015 | 0.006 | 0.13 | -0.014 | 0.064 | -0.866 | -0.003 | | | | 3.521 |
| | (3.942)*** | (-0.137) | (0.091) | (2.134)** | (-0.302) | (1.503) | (2.146)** | (-0.61) | | | | (3.337) |
| 35 | 0.765 | -0.028 | 0.007 | 0.134 | -0.019 | 0.07 | -0.764 | | -2.363 | -13.426 | | 3.589 |
| | (3.951)*** | (-0.263) | (0.095) | (2.256)** | (-0.418) | (1.679)* | (2.165)** | | (2.252)** | (3.028)*** | | (3.379) |
| 36 | 0.771 | -0.017 | 0.006 | 0.132 | -0.013 | 0.063 | | -0.002 | -2.432 | -13.882 | | 3.674 |
| | (3.937)*** | (-0.16) | (0.082) | (2.226)** | (-0.301) | (1.503) | | (-0.576) | (2.201)** | (3.052)*** | | (3.464) |
| 37 | 0.77 | -0.02 | 0.009 | 0.129 | -0.018 | 0.066 | -0.758 | -0.003 | -2.382 | -13.368 | | 3.822 |
| | (3.939)*** | (-0.191) | (0.122) | (2.195)** | (-0.414) | (1.6) | (2.149)** | (-0.619) | (2.277)** | (3.018)*** | | (3.586) |
| 38 | 0.757 | -0.002 | 0.023 | 0.127 | -0.021 | 0.064 | -0.883 | | | | 0 | 3.786 |
| | (3.97)*** | (-0.017) | (0.337) | (2.102)** | (-0.469) | (1.513) | (2.202)** | | | | (2.778)*** | (3.603) |
| 39 | 0.811 | -0.038 | 0.009 | 0.129 | -0.015 | 0.069 | | -0.002 | | | 0 | 3.863 |
| | (4.2)*** | (-0.354) | (0.14) | (2.159)** | (-0.33) | (1.644) | | (-0.565) | | | (2.778)*** | (3.68) |
| 40 | 0.763 | 0.006 | 0.025 | 0.122 | -0.021 | 0.06 | -0.875 | -0.003 | | | 0 | 4.028 |
| | (3.95)*** | (0.059) | (0.374) | (2.035)** | (-0.462) | (1.424) | (2.176)** | (-0.593) | | | (2.783)*** | (3.819) |
| 41 | 0.752 | -0.001 | 0.025 | 0.127 | -0.021 | 0.065 | -0.84 | | | -14.324 | 0 | 3.945 |
| | (3.969)*** | (-0.013) | (0.366) | (2.136)** | (-0.487) | (1.555) | (2.15)** | | | (2.888)*** | (2.758)*** | (3.735) |
| 42 | 0.756 | 0.015 | 0.023 | 0.125 | -0.022 | 0.059 | | -0.003 | | -15.26 | 0 | 4.036 |
| | (3.932)*** | (0.131) | (0.34) | (2.077)** | (-0.5) | (1.382) | | (-0.586) | | (2.763)*** | (2.791)*** | (3.827) |
| 43 | 0.76 | 0.006 | 0.027 | 0.123 | -0.021 | 0.061 | -0.831 | -0.003 | | -14.254 | 0 | 4.179 |
| | (3.955)*** | (0.058) | (0.404) | (2.083)** | (-0.483) | (1.48) | (2.126)** | (-0.633) | | (2.873)*** | (2.761)*** | (3.944) |
| 44 | 0.761 | -0.008 | 0.025 | 0.126 | -0.024 | 0.066 | -0.773 | | -2.48 | -13.125 | 0 | 4.084 |
| | (3.963)*** | (-0.074) | (0.365) | (2.16)** | (-0.561) | (1.595) | (2.197)** | | (2.375)** | (2.987)*** | (2.729)*** | (3.848) |
| 45 | 0.768 | 0.004 | 0.024 | 0.125 | -0.019 | 0.059 | | -0.002 | -2.545 | -13.571 | 0 | 4.171 |
| | (3.942)*** | (0.036) | (0.363) | (2.141)** | (-0.435) | (1.427) | | (-0.563) | (2.32)** | (3.015)*** | (2.774)*** | (3.936) |
| 46 | 0.769 | 0 | 0.027 | 0.122 | -0.024 | 0.063 | -0.767 | -0.003 | -2.496 | -13.064 | 0 | 4.312 |
| | (3.947)*** | (-0.003) | (0.398) | (2.102)** | (-0.56) | (1.522) | (2.18)** | (-0.613) | (2.397)** | (2.977)*** | (2.728)*** | (4.051) |

### 3.1.2 Newey-West t-statistics, controls

| # | $\hat{\lambda}_{\text{intercept}}$ | $\hat{\lambda}_{\beta_{MktRF}}$ | $\hat{\lambda}_{\beta_{SMB}}$ | $\hat{\lambda}_{\beta_{HML}}$ | $\hat{\lambda}_{\beta_{RMW}}$ | $\hat{\lambda}_{\beta_{CMA}}$ | $\hat{\lambda}_{\beta_{INDvw}}$ | $\hat{\lambda}_{\text{IINDvw}}$ | $\hat{\lambda}_{\beta_{MKTvw}}$ | $\hat{\lambda}_{\beta_{FIRMvw}}$ | $\hat{\lambda}_{\text{IFIRMvw}}$ | $\hat{\lambda}_{\text{ln.BM}}$ | $\hat{\lambda}_{\text{ln.ME}}$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.865 | -0.049 | | | | | | | | | | | |
| | (4.545)*** | (-0.387) | | | | | | | | | | | |
| 2 | 1.161 | 0.04 | | | | | -0.88 | | | | | 0.274 | -0.071 |
| | (3.543)*** | (0.337) | | | | | (1.745)* | | | | | (3.896)*** | (1.691)* |
| 3 | 0.91 | 0.015 | | | | | | -0.006 | | | | 0.338 | |
| | (4.648)*** | (0.123) | | | | | | (1.671)* | | | | (5.335)*** | |
| 4 | 1.392 | -0.037 | | | | | | -0.009 | | | | | -0.111 |
| | (4.323)*** | (-0.298) | | | | | | (2.503)** | | | | | (2.802)*** |
| 5 | 1.259 | 0.015 | | | | | | -0.007 | | | | 0.252 | -0.078 |
| | (3.886)*** | (0.133) | | | | | | (1.986)** | | | | (3.682)*** | (1.868)* |
| 6 | 1.202 | 0.045 | | | | | -0.873 | -0.007 | | | | 0.274 | -0.072 |
| | (3.702)*** | (0.383) | | | | | (1.749)* | (2.063)** | | | | (3.92)*** | (1.735)* |
| 7 | 1.176 | 0.01 | | | | | -0.618 | | -2.237 | -2.058 | | 0.273 | -0.068 |
| | (3.652)*** | (0.086) | | | | | (-1.58) | | (2.043)** | (1.968)** | | (3.865)*** | (1.673)* |
| 8 | 1.231 | 0.026 | | | | | | -0.007 | -2.318 | -2.076 | | 0.273 | -0.074 |
| | (3.838)*** | (0.233) | | | | | | (2.079)** | (2.115)** | (2.008)** | | (3.895)*** | (1.827)* |
| 9 | 1.217 | 0.014 | | | | | -0.607 | -0.007 | -2.21 | -2.013 | | 0.274 | -0.07 |
| | (3.803)*** | (0.132) | | | | | (-1.578) | (2.054)** | (2.054)** | (1.964)* | | (3.893)*** | (1.72)* |
| 10 | 1.28 | 0.075 | | | | | -0.919 | | | | -0.001 | 0.259 | -0.09 |
| | (4.085)*** | (0.633) | | | | | (1.83)* | | | | (4.13)*** | (3.724)*** | (2.3)** |
| 11 | 1.366 | 0.049 | | | | | | -0.006 | | | -0.001 | 0.24 | -0.096 |
| | (4.441)*** | (0.437) | | | | | | (1.83)* | | | (4.098)*** | (3.556)*** | (2.479)** |
| 12 | 1.317 | 0.078 | | | | | -0.912 | -0.006 | | | -0.001 | 0.26 | -0.091 |
| | (4.238)*** | (0.672) | | | | | (1.836)* | (1.916)* | | | (4.067)*** | (3.756)*** | (2.34)** |
| 13 | 1.229 | 0.065 | | | | | -0.916 | | | -2.935 | -0.001 | 0.257 | -0.082 |
| | (3.937)*** | (0.558) | | | | | (1.819)* | | | (2.179)** | (4.073)*** | (3.684)*** | (2.098)** |
| 14 | 1.293 | 0.086 | | | | | | -0.007 | | -2.953 | -0.001 | 0.259 | -0.089 |
| | (4.176)*** | (0.732) | | | | | | (1.933)* | | (2.2)** | (4.121)*** | (3.753)*** | (2.316)** |
| 15 | 1.266 | 0.07 | | | | | -0.908 | -0.006 | | -2.906 | -0.001 | 0.258 | -0.083 |
| | (4.089)*** | (0.602) | | | | | (1.822)* | (1.921)* | | (2.182)** | (4.021)*** | (3.716)*** | (2.141)** |
| 16 | 1.27 | 0.042 | | | | | -0.665 | | -2.318 | -2.175 | -0.001 | 0.258 | -0.084 |
| | (4.109)*** | (0.381) | | | | | (1.708)* | | (2.143)** | (2.097)** | (4.093)*** | (3.707)*** | (2.183)** |
| 17 | 1.326 | 0.059 | | | | | | -0.007 | -2.406 | -2.192 | -0.001 | 0.259 | -0.09 |
| | (4.312)*** | (0.545) | | | | | | (1.94)* | (2.226)** | (2.142)** | (4.108)*** | (3.741)*** | (2.367)** |
| 18 | 1.309 | 0.045 | | | | | -0.654 | -0.006 | -2.289 | -2.129 | -0.001 | 0.259 | -0.085 |
| | (4.255)*** | (0.422) | | | | | (1.709)* | (1.926)* | (2.156)** | (2.096)** | (4.036)*** | (3.74)*** | (2.226)** |
| 19 | 0.801 | -0.045 | 0.021 | 0.153 | | | | | | | | | |
| | (4.346)*** | (-0.418) | (0.283) | (2.57)** | | | | | | | | | |
| 20 | 0.881 | 0.003 | 0.018 | 0.078 | | | | -0.006 | | | | 0.305 | |
| | (4.555)*** | (0.031) | (0.25) | (1.441) | | | | (1.809)* | | | | (5.043)*** | |
| 21 | 1.392 | 0.007 | -0.052 | 0.137 | | | | -0.008 | | | | | -0.115 |
| | (4.641)*** | (0.065) | (-0.837) | (2.298)** | | | | (2.47)** | | | | | (3.275)*** |
| 22 | 1.266 | 0.036 | -0.028 | 0.078 | | | | -0.007 | | | | 0.231 | -0.084 |
| | (4.217)*** | (0.339) | (-0.471) | (1.479) | | | | (2.055)** | | | | (3.657)*** | (2.283)** |
| 23 | 1.231 | 0.066 | -0.018 | 0.071 | | | -0.789 | -0.007 | | | | 0.24 | -0.082 |
| | (4.104)*** | (0.616) | (-0.322) | (1.32) | | | (1.712)* | (2.04)** | | | | (3.774)*** | (2.262)** |
| 24 | 1.201 | 0.032 | -0.022 | 0.07 | | | -0.668 | | -2.479 | -2.168 | | 0.246 | -0.079 |
| | (4.026)*** | (0.31) | (-0.382) | (1.33) | | | (-1.583) | | (1.924)* | (1.922)* | | (3.842)*** | (2.187)** |
| 25 | 1.246 | 0.043 | -0.02 | 0.067 | | | | -0.007 | -2.453 | -2.105 | | 0.248 | -0.081 |
| | (4.176)*** | (0.418) | (-0.347) | (1.279) | | | | (2.065)** | (1.941)* | (1.9)* | | (3.876)*** | (2.257)** |
| 26 | 1.238 | 0.034 | -0.02 | 0.069 | | | -0.659 | -0.007 | -2.452 | -2.129 | | 0.248 | -0.079 |
| | (4.149)*** | (0.33) | (-0.344) | (1.324) | | | (-1.582) | (1.991)** | (1.933)* | (1.922)* | | (3.887)*** | (2.215)** |
| 27 | 1.272 | 0.088 | 0.004 | 0.066 | | | -0.839 | | | | -0.001 | 0.227 | -0.093 |
| | (4.376)*** | (0.82) | (0.063) | (1.239) | | | (1.8)* | | | | (4.138)*** | (3.578)*** | (2.689)*** |
| 28 | 1.345 | 0.061 | -0.003 | 0.074 | | | | -0.006 | | | -0.001 | 0.22 | -0.096 |
| | (4.635)*** | (0.584) | (-0.057) | (1.424) | | | | (1.93)* | | | (4.067)*** | (3.514)*** | (2.74)*** |
| 29 | 1.312 | 0.089 | 0.006 | 0.066 | | | -0.83 | -0.006 | | | -0.001 | 0.229 | -0.094 |
| | (4.512)*** | (0.838) | (0.102) | (1.24) | | | (1.806)* | (1.92)* | | | (4.057)*** | (3.623)*** | (2.717)*** |
| 30 | 1.257 | 0.075 | 0.006 | 0.069 | | | -0.864 | | | -2.798 | -0.001 | 0.228 | -0.09 |
| | (4.329)*** | (0.715) | (0.106) | (1.292) | | | (1.858)* | | | (2.209)** | (4.096)*** | (3.579)*** | (2.618)*** |
| 31 | 1.297 | 0.092 | 0.011 | 0.067 | | | | -0.007 | | -2.836 | -0.001 | 0.231 | -0.093 |
| | (4.479)*** | (0.862) | (0.192) | (1.249) | | | | (1.987)** | | (2.176)** | (4.09)*** | (3.64)*** | (2.694)*** |
| 32 | 1.294 | 0.077 | 0.008 | 0.069 | | | -0.853 | -0.006 | | -2.759 | -0.001 | 0.23 | -0.09 |
| | (4.463)*** | (0.735) | (0.147) | (1.297) | | | (1.864)* | (1.918)* | | (2.216)** | (4.02)*** | (3.624)*** | (2.645)*** |
| 33 | 1.273 | 0.054 | 0.002 | 0.065 | | | -0.71 | | -2.547 | -2.275 | -0.001 | 0.235 | -0.089 |
| | (4.395)*** | (0.528) | (0.043) | (1.237) | | | (1.693)* | | (1.998)** | (2.032)** | (4.055)*** | (3.692)*** | (2.595)*** |
| 34 | 1.32 | 0.066 | 0.005 | 0.062 | | | | -0.006 | -2.528 | -2.217 | -0.001 | 0.237 | -0.092 |
| | (4.565)*** | (0.65) | (0.091) | (1.193) | | | | (1.955)* | (2.024)** | (2.019)** | (4.057)*** | (3.733)*** | (2.689)*** |
| 35 | 1.309 | 0.055 | 0.004 | 0.065 | | | -0.701 | -0.006 | -2.518 | -2.235 | -0.001 | 0.237 | -0.089 |
| | (4.517)*** | (0.548) | (0.08) | (1.242) | | | (1.695)* | (1.892)* | (2.009)** | (2.035)** | (3.981)*** | (3.74)*** | (2.623)*** |
| 36 | 0.792 | -0.039 | 0.022 | 0.151 | -0.009 | 0.067 | | | | | | | |
| | (4.279)*** | (-0.365) | (0.309) | (2.587)** | (-0.2) | (1.578) | | | | | | | |
| 37 | 0.875 | 0.01 | 0.018 | 0.075 | 0.005 | 0.027 | | -0.006 | | | | 0.309 | |
| | (4.516)*** | (0.097) | (0.264) | (1.408) | (0.108) | (0.677) | | (1.687)* | | | | (5.174)*** | |
| 38 | 1.388 | 0.015 | -0.053 | 0.13 | 0.013 | 0.054 | | -0.008 | | | | | -0.116 |
| | (4.628)*** | (0.141) | (-0.901) | (2.225)** | (0.317) | (1.268) | | (2.377)** | | | | | (3.344)*** |
| 39 | 1.263 | 0.045 | -0.027 | 0.07 | 0.018 | 0.024 | | -0.006 | | | | 0.237 | -0.084 |
| | (4.192)*** | (0.43) | (-0.489) | (1.355) | (0.454) | (0.613) | | (1.942)* | | | | (3.754)*** | (2.311)** |
| 40 | 1.234 | 0.068 | -0.017 | 0.066 | 0.012 | 0.019 | -0.816 | -0.006 | | | | 0.244 | -0.083 |
| | (4.098)*** | (0.643) | (-0.304) | (1.256) | (0.307) | (0.463) | (1.734)* | (1.949)* | | | | (3.807)*** | (2.289)** |
| 41 | 1.217 | 0.039 | -0.022 | 0.063 | 0.018 | 0.023 | -0.716 | | -2.539 | -2.26 | | 0.248 | -0.081 |
| | (4.048)*** | (0.378) | (-0.403) | (1.236) | (0.473) | (0.577) | (-1.559) | | (1.845)* | (1.887)* | | (3.865)*** | (2.268)** |
| 42 | 1.252 | 0.05 | -0.02 | 0.063 | 0.017 | 0.023 | | -0.006 | -2.585 | -2.213 | | 0.249 | -0.083 |
| | (4.17)*** | (0.479) | (-0.37) | (1.23) | (0.445) | (0.604) | | (1.964)* | (1.897)* | (1.893)* | | (3.886)*** | (2.309)** |
| 43 | 1.252 | 0.04 | -0.02 | 0.063 | 0.017 | 0.022 | -0.705 | -0.006 | -2.509 | -2.217 | | 0.25 | -0.082 |
| | (4.162)*** | (0.387) | (-0.361) | (1.239) | (0.449) | (0.566) | (-1.56) | (1.902)* | (1.855)* | (1.888)* | | (3.905)*** | (2.287)** |
| 44 | 1.268 | 0.089 | 0.004 | 0.061 | 0.005 | 0.015 | -0.867 | | | | -0.001 | 0.231 | -0.092 |
| | (4.338)*** | (0.84) | (0.069) | (1.172) | (0.12) | (0.368) | (1.82)* | | | | (3.987)*** | (3.628)*** | (2.675)*** |
| 45 | 1.336 | 0.067 | -0.003 | 0.066 | 0.009 | 0.021 | | -0.006 | | | -0.001 | 0.226 | -0.095 |
| | (4.581)*** | (0.654) | (-0.052) | (1.295) | (0.225) | (0.538) | | (1.831)* | | | (3.943)*** | (3.612)*** | (2.734)*** |
| 46 | 1.305 | 0.089 | 0.006 | 0.061 | 0.003 | 0.015 | -0.858 | -0.006 | | | -0.001 | 0.233 | -0.093 |
| | (4.467)*** | (0.85) | (0.111) | (1.18) | (0.087) | (0.368) | (1.829)* | (1.844)* | | | (3.904)*** | (3.666)*** | (2.695)*** |
| 47 | 1.257 | 0.078 | 0.006 | 0.063 | 0.006 | 0.014 | -0.889 | | | -2.833 | -0.001 | 0.232 | -0.09 |
| | (4.3)*** | (0.749) | (0.115) | (1.213) | (0.155) | (0.355) | (1.848)* | | | (2.196)** | (3.952)*** | (3.64)*** | (2.618)*** |
| 48 | 1.297 | 0.092 | 0.007 | 0.063 | 0.003 | 0.016 | | -0.006 | | -2.836 | -0.001 | 0.234 | -0.092 |
| | (4.452)*** | (0.869) | (0.134) | (1.2) | (0.068) | (0.398) | | (1.917)* | | (2.173)** | (3.938)*** | (3.682)*** | (2.684)*** |
| 49 | 1.293 | 0.078 | 0.009 | 0.064 | 0.005 | 0.014 | -0.877 | -0.006 | | -2.791 | -0.001 | 0.234 | -0.09 |
| | (4.427)*** | (0.759) | (0.161) | (1.225) | (0.123) | (0.359) | (1.855)* | (1.854)* | | (2.205)** | (3.872)*** | (3.679)*** | (2.637)*** |
| 50 | 1.281 | 0.059 | 0 | 0.058 | 0.01 | 0.018 | -0.756 | | -2.594 | -2.357 | -0.001 | 0.238 | -0.09 |
| | (4.389)*** | (0.571) | (-0.002) | (1.146) | (0.273) | (0.469) | (1.657)* | | (1.906)* | (1.986)** | (3.91)*** | (3.722)*** | (2.637)*** |
| 51 | 1.319 | 0.07 | 0.002 | 0.059 | 0.008 | 0.02 | | -0.006 | -2.645 | -2.312 | -0.001 | 0.238 | -0.092 |
| | (4.527)*** | (0.686) | (0.037) | (1.148) | (0.224) | (0.51) | | (1.874)* | (1.964)* | (1.998)** | (3.919)*** | (3.748)*** | (2.696)*** |
| 52 | 1.316 | 0.059 | 0.002 | 0.059 | 0.009 | 0.018 | -0.746 | -0.006 | -2.562 | -2.313 | -0.001 | 0.239 | -0.09 |
| | (4.505)*** | (0.579) | (0.04) | (1.16) | (0.244) | (0.471) | (1.661)* | (1.822)* | (1.917)* | (1.99)** | (3.835)*** | (3.763)*** | (2.657)*** |

| # | $\hat{\lambda}_{\text{intercept}}$ | $\hat{\lambda}_{\beta_{MktRF}}$ | $\hat{\lambda}_{\beta_{SMB}}$ | $\hat{\lambda}_{\beta_{HML}}$ | $\hat{\lambda}_{\beta_{RMW}}$ | $\hat{\lambda}_{\beta_{CMA}}$ | $\hat{\lambda}_{\beta_{INDew}}$ | $\hat{\lambda}_{\text{IINDew}}$ | $\hat{\lambda}_{\beta_{MKTew}}$ | $\hat{\lambda}_{\beta_{FIRMew}}$ | $\hat{\lambda}_{\text{IFIRMew}}$ | $\hat{\lambda}_{\text{ln.BM}}$ | $\hat{\lambda}_{\text{ln.M}}$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.865 | -0.049 | | | | | | | | | | | |
| | (4.545)*** | (-0.387) | | | | | | | | | | | |
| 2 | 0.856 | 0.049 | | | | | -0.752 | | | | | 0.343 | |
| | (4.371)*** | (0.405) | | | | | (2.119)** | | | | | (5.402)*** | |
| 3 | 1.305 | -0.004 | | | | | -0.75 | | | | | | -0.11 |
| | (3.996)*** | (-0.034) | | | | | (2.135)** | | | | | | (2.79 |
| 4 | 1.182 | 0.05 | | | | | -0.741 | | | | | 0.26 | -0.07 |
| | (3.606)*** | (0.43) | | | | | (2.11)** | | | | | (3.771)*** | (1.83 |
| 5 | 1.22 | 0.022 | | | | | | -0.002 | | | | 0.251 | -0.07 |
| | (3.797)*** | (0.188) | | | | | | (-0.547) | | | | (3.683)*** | (1.80 |
| 6 | 1.177 | 0.059 | | | | | -0.729 | -0.002 | | | | 0.261 | -0.07 |
| | (3.654)*** | (0.507) | | | | | (2.05)** | (-0.509) | | | | (3.816)*** | (1.8) |
| 7 | 1.206 | 0.067 | | | | | -0.582 | | -1.745 | -10.027 | | 0.27 | -0.08 |
| | (3.769)*** | (0.592) | | | | | (1.992)** | | (2.096)** | (2.632)*** | | (3.952)*** | (2.04 |
| 8 | 1.217 | 0.063 | | | | | | -0.002 | -1.791 | -10.074 | | 0.267 | -0.08 |
| | (3.837)*** | (0.557) | | | | | | (-0.487) | (2.129)** | (2.725)*** | | (3.905)*** | (2.01 |
| 9 | 1.197 | 0.075 | | | | | -0.576 | -0.002 | -1.787 | -9.995 | | 0.273 | -0.08 |
| | (3.808)*** | (0.664) | | | | | (1.948)* | (-0.419) | (2.13)** | (2.604)*** | | (4.009)*** | (2.00 |
| 10 | 1.274 | 0.085 | | | | | -0.734 | | | | -0.001 | 0.249 | -0.09 |
| | (4.082)*** | (0.738) | | | | | (2.094)** | | | | (4.029)*** | (3.638)*** | (2.34 |
| 11 | 1.317 | 0.058 | | | | | | -0.001 | | | -0.001 | 0.239 | -0.09 |
| | (4.298)*** | (0.512) | | | | | | (-0.311) | | | (4.081)*** | (3.562)*** | (2.34 |
| 12 | 1.268 | 0.094 | | | | | -0.722 | -0.001 | | | -0.001 | 0.25 | -0.09 |
| | (4.117)*** | (0.812) | | | | | (2.036)** | (-0.288) | | | (4.005)*** | (3.688)*** | (2.30 |
| 13 | 1.254 | 0.096 | | | | | -0.697 | | | -11.594 | -0.001 | 0.259 | -0.09 |
| | (4.021)*** | (0.826) | | | | | (1.974)** | | | (2.475)** | (4.051)*** | (3.773)*** | (2.33 |
| 14 | 1.269 | 0.116 | | | | | | -0.002 | | -12.465 | -0.001 | 0.259 | -0.09 |
| | (4.128)*** | (0.965) | | | | | | (-0.341) | | (2.463)** | (4.033)*** | (3.778)*** | (2.38 |
| 15 | 1.247 | 0.104 | | | | | -0.69 | -0.001 | | -11.556 | -0.001 | 0.262 | -0.08 |
| | (4.06)*** | (0.897) | | | | | (1.931)* | (-0.267) | | (2.447)** | (4.013)*** | (3.841)*** | (2.28 |
| 16 | 1.28 | 0.099 | | | | | -0.577 | | -1.823 | -9.698 | -0.001 | 0.26 | -0.09 |
| | (4.17)*** | (0.888) | | | | | (1.985)** | | (2.213)** | (2.564)** | (4.065)*** | (3.845)*** | (2.48 |
| 17 | 1.293 | 0.096 | | | | | | -0.001 | -1.866 | -9.704 | -0.001 | 0.257 | -0.09 |
| | (4.241)*** | (0.862) | | | | | | (-0.287) | (2.235)** | (2.639)*** | (4.034)*** | (3.804)*** | (2.46 |
| 18 | 1.27 | 0.107 | | | | | -0.571 | -0.001 | -1.863 | -9.677 | -0.001 | 0.263 | -0.09 |
| | (4.197)*** | (0.959) | | | | | (1.941)* | (-0.222) | (2.243)** | (2.539)** | (4.005)*** | (3.907)*** | (2.44 |
| 19 | 0.801 | -0.045 | 0.021 | 0.153 | | | | | | | | | |
| | (4.346)*** | (-0.418) | (0.283) | (2.57)** | | | | | | | | | |
| 20 | 0.854 | 0.011 | 0.017 | 0.075 | | | | -0.002 | | | | 0.303 | |
| | (4.49)*** | (0.104) | (0.241) | (1.369) | | | | (-0.436) | | | | (5.046)*** | |
| 21 | 1.342 | 0.014 | -0.053 | 0.133 | | | | -0.003 | | | | | -0.11 |
| | (4.525)*** | (0.125) | (-0.846) | (2.248)** | | | | (-0.776) | | | | | (3.19 |
| 22 | 1.22 | 0.043 | -0.028 | 0.074 | | | | -0.002 | | | | 0.231 | -0.08 |
| | (4.113)*** | (0.406) | (-0.472) | (1.41) | | | | (-0.491) | | | | (3.672)*** | (2.21 |
| 23 | 1.168 | 0.072 | -0.011 | 0.065 | | | -0.704 | -0.002 | | | | 0.241 | -0.07 |
| | (3.948)*** | (0.668) | (-0.188) | (1.206) | | | (1.975)** | (-0.49) | | | | (3.821)*** | (2.12 |
| 24 | 1.202 | 0.064 | -0.019 | 0.06 | | | -0.52 | | -1.546 | -9.221 | | 0.244 | -0.08 |
| | (4.004)*** | (0.621) | (-0.323) | (1.161) | | | (1.928)* | | (2.027)** | (2.646)*** | | (3.832)*** | (2.31 |
| 25 | 1.204 | 0.064 | -0.018 | 0.062 | | | | -0.002 | -1.609 | -9.305 | | 0.244 | -0.08 |
| | (4.067)*** | (0.62) | (-0.303) | (1.205) | | | | (-0.408) | (2.045)** | (2.69)*** | | (3.849)*** | (2.28 |
| 26 | 1.195 | 0.071 | -0.016 | 0.057 | | | -0.517 | -0.002 | -1.583 | -9.202 | | 0.247 | -0.08 |
| | (4.023)*** | (0.687) | (-0.283) | (1.107) | | | (1.892)* | (-0.367) | (2.061)** | (2.619)*** | | (3.898)*** | (2.26 |
| 27 | 1.243 | 0.091 | 0.011 | 0.063 | | | -0.713 | | | | -0.001 | 0.228 | -0.08 |
| | (4.295)*** | (0.858) | (0.19) | (1.188) | | | (2.023)** | | | | (4.102)*** | (3.615)*** | (2.55 |
| 28 | 1.288 | 0.07 | -0.002 | 0.07 | | | | -0.001 | | | -0.001 | 0.221 | -0.09 |
| | (4.478)*** | (0.665) | (-0.036) | (1.357) | | | | (-0.268) | | | (4.041)*** | (3.537)*** | (2.60 |
| 29 | 1.237 | 0.098 | 0.013 | 0.06 | | | -0.705 | -0.001 | | | -0.001 | 0.231 | -0.08 |
| | (4.306)*** | (0.924) | (0.239) | (1.136) | | | (1.977)** | (-0.277) | | | (4.051)*** | (3.683)*** | (2.51 |
| 30 | 1.238 | 0.104 | 0.011 | 0.063 | | | -0.654 | | | -10.902 | -0.001 | 0.236 | -0.09 |
| | (4.273)*** | (0.975) | (0.203) | (1.194) | | | (1.924)* | | | (2.443)** | (4.104)*** | (3.727)*** | (2.61 |
| 31 | 1.231 | 0.119 | 0.014 | 0.064 | | | | -0.001 | | -11.778 | -0.001 | 0.236 | -0.09 |
| | (4.288)*** | (1.073) | (0.249) | (1.201) | | | | (-0.284) | | (2.379)** | (4.063)*** | (3.726)*** | (2.56 |
| 32 | 1.231 | 0.111 | 0.014 | 0.061 | | | -0.649 | -0.001 | | -10.878 | -0.001 | 0.24 | -0.08 |
| | (4.281)*** | (1.044) | (0.261) | (1.162) | | | (1.888)* | (-0.241) | | (2.42)** | (4.049)*** | (3.798)*** | (2.55 |
| 33 | 1.265 | 0.088 | 0.007 | 0.056 | | | -0.519 | | -1.629 | -8.888 | -0.001 | 0.234 | -0.09 |
| | (4.343)*** | (0.869) | (0.123) | (1.093) | | | (1.93)* | | (2.159)** | (2.552)** | (4.11)*** | (3.697)*** | (2.67 |
| 34 | 1.266 | 0.09 | 0.008 | 0.059 | | | | -0.001 | -1.693 | -8.957 | -0.001 | 0.234 | -0.09 |
| | (4.401)*** | (0.882) | (0.143) | (1.15) | | | | (-0.2) | (2.167)** | (2.585)** | (4.065)*** | (3.716)*** | (2.65 |
| 35 | 1.256 | 0.095 | 0.01 | 0.054 | | | -0.516 | -0.001 | -1.665 | -8.878 | -0.001 | 0.237 | -0.09 |
| | (4.348)*** | (0.934) | (0.176) | (1.051) | | | (1.894)* | (-0.161) | (2.188)** | (2.528)** | (4.046)*** | (3.769)*** | (2.62 |
| 36 | 1.223 | 0.034 | -0.03 | 0.078 | | | | | | | | 0.229 | -0.08 |
| | (4.076)*** | (0.32) | (-0.506) | (1.48) | | | | | | | | (3.611)*** | (2.25 |
| 37 | 0.847 | 0.017 | 0.018 | 0.072 | 0.005 | 0.023 | | -0.001 | | | | 0.308 | |
| | (4.447)*** | (0.167) | (0.266) | (1.343) | (0.129) | (0.574) | | (-0.294) | | | | (5.184)*** | |
| 38 | 1.338 | 0.022 | -0.053 | 0.127 | 0.013 | 0.051 | | -0.003 | | | | | -0.11 |
| | (4.51)*** | (0.201) | (-0.897) | (2.183)** | (0.32) | (1.18) | | (-0.637) | | | | | (3.27 |
| 39 | 1.217 | 0.052 | -0.027 | 0.066 | 0.018 | 0.02 | | -0.001 | | | | 0.237 | -0.08 |
| | (4.088)*** | (0.495) | (-0.477) | (1.294) | (0.463) | (0.51) | | (-0.354) | | | | (3.766)*** | (2.25 |
| 40 | 1.186 | 0.074 | -0.017 | 0.059 | 0.016 | 0.013 | -0.696 | -0.002 | | | | 0.245 | -0.08 |
| | (3.97)*** | (0.701) | (-0.31) | (1.138) | (0.408) | (0.318) | (2.018)** | (-0.392) | | | | (3.863)*** | (2.18 |
| 41 | 1.205 | 0.066 | -0.02 | 0.057 | 0.015 | 0.018 | -0.525 | | -1.62 | -9.297 | | 0.247 | -0.08 |
| | (3.991)*** | (0.655) | (-0.352) | (1.14) | (0.395) | (0.459) | (1.925)* | | (2.098)** | (2.661)*** | | (3.874)*** | (2.32 |
| 42 | 1.204 | 0.069 | -0.014 | 0.057 | 0.017 | 0.013 | | -0.001 | -1.713 | -9.56 | | 0.248 | -0.08 |
| | (4.05)*** | (0.684) | (-0.247) | (1.135) | (0.449) | (0.313) | | (-0.323) | (2.149)** | (2.756)*** | | (3.911)*** | (2.32 |
| 43 | 1.198 | 0.072 | -0.017 | 0.054 | 0.015 | 0.015 | -0.519 | -0.001 | -1.649 | -9.254 | | 0.25 | -0.08 |
| | (4.014)*** | (0.717) | (-0.307) | (1.09) | (0.383) | (0.369) | (1.882)* | (-0.33) | (2.124)** | (2.633)*** | | (3.929)*** | (2.28 |
| 44 | 1.254 | 0.091 | 0.004 | 0.057 | 0.008 | 0.013 | -0.709 | | | | -0.001 | 0.232 | -0.09 |
| | (4.291)*** | (0.88) | (0.075) | (1.108) | (0.198) | (0.316) | (2.071)** | | | | (3.994)*** | (3.674)*** | (2.57 |
| 45 | 1.279 | 0.076 | -0.001 | 0.063 | 0.01 | 0.017 | | -0.001 | | | -0.001 | 0.227 | -0.09 |
| | (4.426)*** | (0.734) | (-0.026) | (1.237) | (0.243) | (0.43) | | (-0.154) | | | (3.935)*** | (3.636)*** | (2.60 |
| 46 | 1.247 | 0.098 | 0.007 | 0.055 | 0.007 | 0.009 | -0.697 | -0.001 | | | -0.001 | 0.235 | -0.08 |
| | (4.3)*** | (0.943) | (0.128) | (1.064) | (0.186) | (0.222) | (2.02)** | (-0.2) | | | (3.943)*** | (3.736)*** | (2.53 |
| 47 | 1.246 | 0.103 | 0.006 | 0.059 | 0.005 | 0.016 | -0.658 | | | -10.954 | -0.001 | 0.24 | -0.09 |
| | (4.268)*** | (0.992) | (0.113) | (1.163) | (0.141) | (0.399) | (1.927)* | | | (2.462)** | (4.004)*** | (3.767)*** | (2.62 |
| 48 | 1.233 | 0.117 | 0.013 | 0.058 | 0.004 | 0.01 | | -0.001 | | -11.888 | -0.001 | 0.239 | -0.09 |
| | (4.269)*** | (1.082) | (0.234) | (1.134) | (0.11) | (0.242) | | (-0.178) | | (2.428)** | (3.952)*** | (3.786)*** | (2.57 |
| 49 | 1.238 | 0.11 | 0.009 | 0.057 | 0.005 | 0.013 | -0.65 | -0.001 | | -10.898 | -0.001 | 0.242 | -0.08 |
| | (4.279)*** | (1.056) | (0.171) | (1.133) | (0.126) | (0.318) | (1.887)* | (-0.198) | | (2.437)** | (3.951)*** | (3.828)*** | (2.57 |
| 50 | 1.263 | 0.088 | 0.005 | 0.053 | 0.007 | 0.014 | -0.523 | | -1.697 | -8.944 | -0.001 | 0.238 | -0.09 |
| | (4.308)*** | (0.889) | (0.088) | (1.06) | (0.188) | (0.356) | (1.923)* | | (2.221)** | (2.562)** | (4.007)*** | (3.744)*** | (2.66 |
| 51 | 1.26 | 0.093 | 0.011 | 0.054 | 0.009 | 0.009 | | -0.001 | -1.791 | -9.197 | -0.001 | 0.238 | -0.09 |
| | (4.36)*** | (0.928) | (0.192) | (1.073) | (0.239) | (0.216) | | (-0.137) | (2.263)** | (2.647)*** | (3.96)*** | (3.788)*** | (2.65 |
| 52 | 1.254 | 0.094 | 0.008 | 0.051 | 0.007 | 0.011 | -0.517 | -0.001 | -1.725 | -8.907 | -0.001 | 0.241 | -0.09 |
| | (4.319)*** | (0.95) | (0.141) | (1.023) | (0.173) | (0.278) | (1.882)* | (-0.148) | (2.244)** | (2.536)** | (3.954)*** | (3.807)*** | (2.61 |

## 3.2 SIC-10 divisions

### 3.2.1 Newey-West t-statistics

| # | $\hat{\lambda}_{\text{intercept}}$ | $\hat{\lambda}_{\beta_{MktRF}}$ | $\hat{\lambda}_{\beta_{SMB}}$ | $\hat{\lambda}_{\beta_{HML}}$ | $\hat{\lambda}_{\beta_{RMW}}$ | $\hat{\lambda}_{\beta_{CMA}}$ | $\hat{\lambda}_{\beta_{INDvw}}$ | $\hat{\lambda}_{\text{IINDvw}}$ | $\hat{\lambda}_{\beta_{MKTvw}}$ | $\hat{\lambda}_{\beta_{FIRMvw}}$ | $\hat{\lambda}_{\text{IFIRMvw}}$ | $R^2$, $\bar{R}^2$ (in %) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.905 | -0.111 | | | | | | | | | | 1.604 |
| | (4.528)*** | (-0.874) | | | | | | | | | | (1.577) |
| 2 | 0.866 | -0.078 | | | | | -0.441 | | | | | 1.914 |
| | (4.274)*** | (-0.596) | | | | | (-1.575) | | | | | (1.86) |
| 3 | 0.978 | -0.099 | | | | | | -0.021 | | | | 1.936 |
| | (4.837)*** | (-0.789) | | | | | | (2.063)** | | | | (1.882) |
| 4 | 0.936 | -0.065 | | | | | -0.448 | -0.022 | | | | 2.238 |
| | (4.592)*** | (-0.506) | | | | | (-1.611) | (2.156)** | | | | (2.158) |
| 5 | 0.843 | -0.091 | | | | | -0.375 | | -3.235 | -3.229 | | 2.48 |
| | (4.248)*** | (-0.743) | | | | | (-1.55) | | (2.07)** | (2.132)** | | (2.373) |
| 6 | 0.927 | -0.081 | | | | | | -0.023 | -3.471 | -3.554 | | 2.581 |
| | (4.63)*** | (-0.645) | | | | | | (2.26)** | (2.057)** | (2.158)** | | (2.474) |
| 7 | 0.921 | -0.081 | | | | | -0.381 | -0.022 | -3.209 | -3.215 | | 2.783 |
| | (4.601)*** | (-0.673) | | | | | (-1.588) | (2.252)** | (2.075)** | (2.155)** | | (2.649) |
| 8 | 0.859 | -0.04 | | | | | -0.469 | | | | 0 | 2.645 |
| | (4.312)*** | (-0.316) | | | | | (1.687)* | | | | (2.548)** | (2.565) |
| 9 | 0.966 | -0.064 | | | | | | -0.019 | | | 0 | 2.69 |
| | (4.882)*** | (-0.532) | | | | | | (1.943)* | | | (2.467)** | (2.61) |
| 10 | 0.928 | -0.03 | | | | | -0.475 | -0.02 | | | 0 | 2.958 |
| | (4.646)*** | (-0.238) | | | | | (1.724)* | (2.047)** | | | (2.541)** | (2.852) |
| 11 | 0.85 | -0.05 | | | | | -0.427 | | | -3.733 | 0 | 2.861 |
| | (4.277)*** | (-0.402) | | | | | (1.676)* | | | (2.315)** | (2.7)*** | (2.755) |
| 12 | 0.92 | -0.03 | | | | | | -0.021 | | -4.058 | 0 | 2.96 |
| | (4.616)*** | (-0.239) | | | | | | (2.087)** | | (2.31)** | (2.62)*** | (2.854) |
| 13 | 0.921 | -0.04 | | | | | -0.434 | -0.02 | | -3.732 | 0 | 3.163 |
| | (4.615)*** | (-0.331) | | | | | (1.715)* | (2.076)** | | (2.345)** | (2.686)*** | (3.03) |
| 14 | 0.838 | -0.059 | | | | | -0.402 | | -3.392 | -3.431 | 0 | 3.101 |
| | (4.274)*** | (-0.489) | | | | | (1.672)* | | (2.188)** | (2.298)** | (2.928)*** | (2.968) |
| 15 | 0.916 | -0.045 | | | | | | -0.021 | -3.653 | -3.769 | 0 | 3.227 |
| | (4.644)*** | (-0.368) | | | | | | (2.145)** | (2.185)** | (2.322)** | (2.927)*** | (3.095) |
| 16 | 0.915 | -0.051 | | | | | -0.407 | -0.021 | -3.364 | -3.418 | 0 | 3.395 |
| | (4.634)*** | (-0.429) | | | | | (1.712)* | (2.149)** | (2.195)** | (2.325)** | (2.898)*** | (3.236) |
| 17 | 0.837 | -0.09 | -0.017 | 0.146 | | | | | | | | 2.765 |
| | (4.351)*** | (-0.824) | (-0.229) | (2.324)** | | | | | | | | (2.685) |
| 18 | 0.917 | -0.081 | -0.02 | 0.145 | | | | -0.02 | | | | 3.064 |
| | (4.736)*** | (-0.763) | (-0.273) | (2.353)** | | | | (2.048)** | | | | (2.958) |
| 19 | 0.875 | -0.041 | -0.009 | 0.136 | | | -0.404 | -0.02 | | | | 3.27 |
| | (4.468)*** | (-0.376) | (-0.121) | (2.193)** | | | (-1.565) | (2.052)** | | | | (3.138) |
| 20 | 0.796 | -0.056 | -0.004 | 0.138 | | | -0.329 | | -3.005 | -2.892 | | 3.28 |
| | (4.125)*** | (-0.53) | (-0.059) | (2.259)** | | | (-1.548) | | (2.143)** | (2.118)** | | (3.121) |
| 21 | 0.872 | -0.045 | -0.007 | 0.141 | | | | -0.021 | -3.42 | -3.288 | | 3.427 |
| | (4.464)*** | (-0.42) | (-0.096) | (2.312)** | | | | (2.182)** | (2.032)** | (2.036)** | | (3.269) |
| 22 | 0.877 | -0.05 | -0.007 | 0.139 | | | -0.333 | -0.021 | -2.988 | -2.872 | | 3.558 |
| | (4.488)*** | (-0.485) | (-0.095) | (2.304)** | | | (-1.585) | (2.165)** | (2.148)** | (2.132)** | | (3.373) |
| 23 | 0.798 | -0.027 | 0.016 | 0.127 | | | -0.423 | | | | 0 | 3.518 |
| | (4.15)*** | (-0.246) | (0.222) | (2.053)** | | | (-1.643) | | | | (2.931)*** | (3.386) |
| 24 | 0.914 | -0.06 | 0 | 0.138 | | | | -0.019 | | | 0 | 3.605 |
| | (4.781)*** | (-0.566) | (0.002) | (2.28)** | | | | (1.963)* | | | (2.879)*** | (3.473) |
| 25 | 0.873 | -0.021 | 0.013 | 0.128 | | | -0.429 | -0.019 | | | 0 | 3.8 |
| | (4.517)*** | (-0.192) | (0.185) | (2.101)** | | | (1.677)* | (1.968)** | | | (2.915)*** | (3.642) |
| 26 | 0.797 | -0.031 | 0.02 | 0.132 | | | -0.374 | | | -3.311 | 0 | 3.675 |
| | (4.157)*** | (-0.293) | (0.281) | (2.141)** | | | (1.667)* | | | (2.255)** | (2.957)*** | (3.517) |
| 27 | 0.871 | -0.02 | 0.013 | 0.134 | | | | -0.02 | | -3.678 | 0 | 3.805 |
| | (4.518)*** | (-0.185) | (0.189) | (2.178)** | | | | (2.045)** | | (2.151)** | (2.951)*** | (3.647) |
| 28 | 0.874 | -0.026 | 0.016 | 0.134 | | | -0.38 | -0.019 | | -3.303 | 0 | 3.948 |
| | (4.524)*** | (-0.248) | (0.234) | (2.195)** | | | (1.707)* | (1.992)** | | (2.276)** | (2.939)*** | (3.764) |
| 29 | 0.799 | -0.037 | 0.016 | 0.13 | | | -0.351 | | -3.113 | -3.054 | 0 | 3.801 |
| | (4.167)*** | (-0.356) | (0.238) | (2.152)** | | | (1.668)* | | (2.241)** | (2.268)** | (2.96)*** | (3.617) |
| 30 | 0.872 | -0.026 | 0.014 | 0.133 | | | | -0.02 | -3.544 | -3.458 | 0 | 3.946 |
| | (4.507)*** | (-0.24) | (0.2) | (2.216)** | | | | (2.101)** | (2.129)** | (2.172)** | (3.007)*** | (3.761) |
| 31 | 0.879 | -0.032 | 0.013 | 0.132 | | | -0.356 | -0.02 | -3.094 | -3.035 | 0 | 4.071 |
| | (4.539)*** | (-0.318) | (0.19) | (2.214)** | | | (1.708)* | (2.089)** | (2.248)** | (2.287)** | (2.929)*** | (3.861) |
| 32 | 0.819 | -0.075 | -0.014 | 0.141 | -0.006 | 0.075 | | | | | | 3.112 |
| | (4.253)*** | (-0.686) | (-0.197) | (2.292)** | (-0.138) | (1.76)* | | | | | | (2.98) |
| 33 | 0.899 | -0.069 | -0.017 | 0.142 | -0.005 | 0.07 | | -0.019 | | | | 3.387 |
| | (4.65)*** | (-0.65) | (-0.239) | (2.354)** | (-0.109) | (1.683)* | | (1.975)** | | | | (3.228) |
| 34 | 0.866 | -0.037 | -0.007 | 0.137 | -0.013 | 0.064 | -0.413 | -0.019 | | | | 3.567 |
| | (4.445)*** | (-0.337) | (-0.102) | (2.268)** | (-0.287) | (1.536) | (-1.53) | (1.998)** | | | | (3.383) |
| 35 | 0.789 | -0.049 | -0.003 | 0.135 | -0.007 | 0.067 | -0.343 | | -3.055 | -2.924 | | 3.554 |
| | (4.077)*** | (-0.46) | (-0.038) | (2.27)** | (-0.156) | (1.635) | (-1.501) | | (2.089)** | (2.056)** | | (3.342) |
| 36 | 0.864 | -0.039 | -0.007 | 0.139 | -0.01 | 0.065 | | -0.02 | -3.387 | -3.234 | | 3.7 |
| | (4.431)*** | (-0.36) | (-0.094) | (2.365)** | (-0.235) | (1.613) | | (2.111)** | (2.01)** | (1.979)** | | (3.489) |
| 37 | 0.869 | -0.045 | -0.005 | 0.138 | -0.006 | 0.064 | -0.343 | -0.02 | -3.026 | -2.887 | | 3.813 |
| | (4.457)*** | (-0.434) | (-0.076) | (2.35)** | (-0.139) | (1.585) | (-1.527) | (2.11)** | (2.095)** | (2.066)** | | (3.575) |
| 38 | 0.786 | -0.021 | 0.015 | 0.128 | -0.021 | 0.064 | -0.437 | | | | 0 | 3.815 |
| | (4.082)*** | (-0.186) | (0.216) | (2.106)** | (-0.473) | (1.525) | (-1.611) | | | | (2.835)*** | (3.631) |
| 39 | 0.895 | -0.049 | 0.002 | 0.135 | -0.012 | 0.067 | | -0.018 | | | 0 | 3.904 |
| | (4.684)*** | (-0.465) | (0.036) | (2.269)** | (-0.264) | (1.619) | | (1.931)* | | | (2.824)*** | (3.72) |
| 40 | 0.862 | -0.017 | 0.012 | 0.13 | -0.02 | 0.061 | -0.439 | -0.018 | | | 0 | 4.078 |
| | (4.474)*** | (-0.153) | (0.177) | (2.183)** | (-0.451) | (1.467) | (-1.637) | (1.952)* | | | (2.833)*** | (3.867) |
| 41 | 0.783 | -0.021 | 0.018 | 0.131 | -0.019 | 0.064 | -0.393 | | | -3.406 | 0 | 3.943 |
| | (4.074)*** | (-0.191) | (0.273) | (2.167)** | (-0.439) | (1.523) | (-1.635) | | | (2.228)** | (2.839)*** | (3.732) |
| 42 | 0.856 | -0.012 | 0.013 | 0.137 | -0.024 | 0.062 | | -0.019 | | -3.726 | 0 | 4.076 |
| | (4.446)*** | (-0.106) | (0.197) | (2.268)** | (-0.529) | (1.498) | | (2.028)** | | (2.125)** | (2.856)*** | (3.866) |
| 43 | 0.861 | -0.017 | 0.015 | 0.134 | -0.018 | 0.061 | -0.395 | -0.018 | | -3.381 | 0 | 4.199 |
| | (4.464)*** | (-0.164) | (0.227) | (2.249)** | (-0.416) | (1.476) | (1.665)* | (1.988)** | | (2.247)** | (2.836)*** | (3.963) |
| 44 | 0.788 | -0.03 | 0.015 | 0.127 | -0.013 | 0.064 | -0.365 | | -3.146 | -3.082 | 0 | 4.059 |
| | (4.102)*** | (-0.289) | (0.224) | (2.171)** | (-0.303) | (1.558) | (-1.608) | | (2.167)** | (2.19)** | (2.84)*** | (3.823) |
| 45 | 0.861 | -0.02 | 0.012 | 0.132 | -0.017 | 0.061 | | -0.019 | -3.499 | -3.405 | 0 | 4.202 |
| | (4.461)*** | (-0.184) | (0.173) | (2.271)** | (-0.384) | (1.524) | | (2.07)** | (2.095)** | (2.108)** | (2.9)*** | (3.966) |
| 46 | 0.868 | -0.028 | 0.012 | 0.131 | -0.012 | 0.061 | -0.365 | -0.019 | -3.115 | -3.045 | 0 | 4.312 |
| | (4.493)*** | (-0.268) | (0.176) | (2.261)** | (-0.284) | (1.517) | (-1.638) | (2.072)** | (2.175)** | (2.205)** | (2.826)*** | (4.05) |

| # | $\hat{\lambda}_{\text{intercept}}$ | $\hat{\lambda}_{\beta_{MktRF}}$ | $\hat{\lambda}_{\beta_{SMB}}$ | $\hat{\lambda}_{\beta_{HML}}$ | $\hat{\lambda}_{\beta_{RMW}}$ | $\hat{\lambda}_{\beta_{CMA}}$ | $\hat{\lambda}_{\beta_{INDew}}$ | $\hat{\lambda}_{\text{IINDew}}$ | $\hat{\lambda}_{\beta_{MKTew}}$ | $\hat{\lambda}_{\beta_{FIRMew}}$ | $\hat{\lambda}_{\text{IFIRMew}}$ | $R^2$, $\bar{R}^2$ (in %) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.905 | -0.111 | | | | | | | | | | 1.604 |
| | (4.528)*** | (-0.874) | | | | | | | | | | (1.577) |
| 2 | 0.883 | -0.088 | | | | | -3.668 | | | | | 1.871 |
| | (4.416)*** | (-0.682) | | | | | (1.919)* | | | | | (1.817) |
| 3 | 0.926 | -0.088 | | | | | | -0.018 | | | | 2.001 |
| | (4.638)*** | (-0.693) | | | | | | (-1) | | | | (1.947) |
| 4 | 0.905 | -0.064 | | | | | -3.912 | -0.018 | | | | 2.261 |
| | (4.534)*** | (-0.495) | | | | | (1.962)* | (-1.039) | | | | (2.181) |
| 5 | 0.833 | -0.045 | | | | | -3.649 | | -2.361 | -15.875 | | 2.35 |
| | (4.13)*** | (-0.358) | | | | | (2.114)** | | (1.956)* | (3.123)*** | | (2.243) |
| 6 | 0.861 | -0.03 | | | | | | -0.02 | -2.454 | -16.65 | | 2.526 |
| | (4.266)*** | (-0.23) | | | | | | (-1.141) | (1.893)* | (3.13)*** | | (2.419) |
| 7 | 0.859 | -0.023 | | | | | -3.831 | -0.02 | -2.458 | -16.451 | | 2.723 |
| | (4.261)*** | (-0.185) | | | | | (2.123)** | (-1.14) | (1.974)** | (3.154)*** | | (2.59) |
| 8 | 0.868 | -0.052 | | | | | -3.702 | | | | 0 | 2.594 |
| | (4.414)*** | (-0.413) | | | | | (1.944)* | | | | (2.461)** | (2.513) |
| 9 | 0.914 | -0.053 | | | | | | -0.015 | | | 0 | 2.75 |
| | (4.653)*** | (-0.434) | | | | | | (-0.833) | | | (2.476)** | (2.67) |
| 10 | 0.888 | -0.028 | | | | | -3.945 | -0.015 | | | 0 | 2.975 |
| | (4.525)*** | (-0.229) | | | | | (1.988)** | (-0.883) | | | (2.474)** | (2.869) |
| 11 | 0.823 | -0.014 | | | | | -3.637 | | | -16.233 | 0 | 2.827 |
| | (4.169)*** | (-0.113) | | | | | (1.998)** | | | (2.978)*** | (2.472)** | (2.72) |
| 12 | 0.851 | 0 | | | | | | -0.016 | | -16.399 | 0 | 2.998 |
| | (4.326)*** | (-0.002) | | | | | | (-0.888) | | (3.012)*** | (2.461)** | (2.892) |
| 13 | 0.843 | 0.009 | | | | | -3.834 | -0.016 | | -16.805 | 0 | 3.202 |
| | (4.283)*** | (0.068) | | | | | (2.018)** | (-0.905) | | (3.002)*** | (2.481)** | (3.069) |
| 14 | 0.818 | -0.015 | | | | | -3.59 | | -2.498 | -15.436 | 0 | 3.015 |
| | (4.11)*** | (-0.121) | | | | | (2.091)** | | (2.084)** | (3.055)*** | (2.484)** | (2.882) |
| 15 | 0.846 | 0.002 | | | | | | -0.017 | -2.605 | -16.131 | 0 | 3.208 |
| | (4.243)*** | (0.016) | | | | | | (-0.997) | (2.028)** | (3.06)*** | (2.481)** | (3.076) |
| 16 | 0.842 | 0.006 | | | | | -3.768 | -0.017 | -2.597 | -16.023 | 0 | 3.379 |
| | (4.237)*** | (0.05) | | | | | (2.099)** | (-1.01) | (2.1)** | (3.09)*** | (2.491)** | (3.221) |
| 17 | 0.837 | -0.09 | -0.017 | 0.146 | | | | | | | | 2.765 |
| | (4.351)*** | (-0.824) | (-0.229) | (2.324)** | | | | | | | | (2.685) |
| 18 | 0.863 | -0.071 | -0.017 | 0.139 | | | | -0.017 | | | | 3.131 |
| | (4.487)*** | (-0.658) | (-0.226) | (2.239)** | | | | (-0.96) | | | | (3.025) |
| 19 | 0.845 | -0.057 | -0.012 | 0.135 | | | -3.828 | -0.016 | | | | 3.275 |
| | (4.394)*** | (-0.506) | (-0.166) | (2.18)** | | | (1.837)* | (-0.931) | | | | (3.142) |
| 20 | 0.775 | -0.039 | -0.004 | 0.135 | | | -3.415 | | -2.312 | -15.954 | | 3.271 |
| | (3.987)*** | (-0.351) | (-0.057) | (2.135)** | | | (1.985)** | | (1.948)* | (3.195)*** | | (3.112) |
| 21 | 0.805 | -0.022 | -0.004 | 0.134 | | | | -0.017 | -2.377 | -16.791 | | 3.507 |
| | (4.136)*** | (-0.199) | (-0.06) | (2.135)** | | | | (-0.983) | (1.945)* | (3.269)*** | | (3.349) |
| 22 | 0.8 | -0.022 | -0.003 | 0.131 | | | -3.593 | -0.016 | -2.409 | -16.557 | | 3.612 |
| | (4.117)*** | (-0.2) | (-0.038) | (2.087)** | | | (1.998)** | (-0.973) | (1.969)** | (3.224)*** | | (3.427) |
| 23 | 0.818 | -0.054 | 0.007 | 0.133 | | | -3.596 | | | | 0 | 3.455 |
| | (4.288)*** | (-0.473) | (0.099) | (2.155)** | | | (1.805)* | | | | (2.913)*** | (3.323) |
| 24 | 0.859 | -0.049 | 0.003 | 0.131 | | | | -0.014 | | | 0 | 3.67 |
| | (4.513)*** | (-0.458) | (0.048) | (2.161)** | | | | (-0.812) | | | (2.903)*** | (3.538) |
| 25 | 0.84 | -0.034 | 0.008 | 0.127 | | | -3.858 | -0.013 | | | 0 | 3.807 |
| | (4.409)*** | (-0.306) | (0.117) | (2.09)** | | | (1.856)* | (-0.786) | | | (2.931)*** | (3.649) |
| 26 | 0.776 | -0.019 | 0.014 | 0.126 | | | -3.433 | | | -16.235 | 0 | 3.637 |
| | (4.074)*** | (-0.169) | (0.196) | (1.99)** | | | (1.805)* | | | (2.944)*** | (2.951)*** | (3.479) |
| 27 | 0.804 | -0.001 | 0.013 | 0.123 | | | | -0.014 | | -17.021 | 0 | 3.871 |
| | (4.227)*** | (-0.009) | (0.18) | (1.958)* | | | | (-0.794) | | (3.008)*** | (2.97)*** | (3.713) |
| 28 | 0.799 | -0.001 | 0.015 | 0.121 | | | -3.645 | -0.014 | | -16.861 | 0 | 3.98 |
| | (4.187)*** | (-0.008) | (0.22) | (1.935)* | | | (1.834)* | (-0.804) | | (2.965)*** | (2.97)*** | (3.796) |
| 29 | 0.775 | -0.018 | 0.016 | 0.128 | | | -3.342 | | -2.428 | -15.397 | 0 | 3.792 |
| | (4.017)*** | (-0.161) | (0.226) | (2.058)** | | | (1.95)* | | (2.058)** | (3.103)*** | (2.929)*** | (3.608) |
| 30 | 0.803 | -0.001 | 0.017 | 0.126 | | | | -0.014 | -2.496 | -16.126 | 0 | 4.022 |
| | (4.158)*** | (-0.012) | (0.237) | (2.055)** | | | | (-0.855) | (2.062)** | (3.176)*** | (2.946)*** | (3.838) |
| 31 | 0.799 | -0.001 | 0.017 | 0.124 | | | -3.516 | -0.014 | -2.526 | -16.013 | 0 | 4.125 |
| | (4.141)*** | (-0.013) | (0.246) | (2.019)** | | | (1.961)* | (-0.851) | (2.075)** | (3.137)*** | (2.948)*** | (3.915) |
| 32 | 0.819 | -0.075 | -0.014 | 0.141 | -0.006 | 0.075 | | | | | | 3.112 |
| | (4.253)*** | (-0.686) | (-0.197) | (2.292)** | (-0.138) | (1.76)* | | | | | | (2.98) |
| 33 | 0.843 | -0.058 | -0.014 | 0.135 | -0.005 | 0.066 | | -0.014 | | | | 3.446 |
| | (4.378)*** | (-0.542) | (-0.195) | (2.236)** | (-0.102) | (1.572) | | (-0.834) | | | | (3.288) |
| 34 | 0.829 | -0.047 | -0.013 | 0.136 | -0.009 | 0.065 | -3.941 | -0.014 | | | | 3.59 |
| | (4.293)*** | (-0.411) | (-0.176) | (2.243)** | (-0.193) | (1.544) | (1.765)* | (-0.832) | | | | (3.405) |
| 35 | 0.768 | -0.03 | -0.007 | 0.136 | -0.008 | 0.065 | -3.482 | | -2.448 | -16.786 | | 3.565 |
| | (3.948)*** | (-0.268) | (-0.103) | (2.212)** | (-0.162) | (1.535) | (1.856)* | | (1.94)* | (3.131)*** | | (3.354) |
| 36 | 0.793 | -0.014 | -0.004 | 0.134 | -0.006 | 0.057 | | -0.014 | -2.464 | -17.312 | | 3.772 |
| | (4.08)*** | (-0.128) | (-0.057) | (2.207)** | (-0.133) | (1.347) | | (-0.884) | (1.982)** | (3.29)*** | | (3.562) |
| 37 | 0.792 | -0.016 | -0.007 | 0.133 | -0.007 | 0.057 | -3.636 | -0.014 | -2.521 | -17.262 | | 3.88 |
| | (4.078)*** | (-0.141) | (-0.091) | (2.184)** | (-0.152) | (1.361) | (1.884)* | (-0.882) | (1.955)* | (3.159)*** | | (3.643) |
| 38 | 0.803 | -0.042 | 0.006 | 0.132 | -0.017 | 0.07 | -3.721 | | | | 0 | 3.775 |
| | (4.186)*** | (-0.368) | (0.084) | (2.179)** | (-0.359) | (1.651)* | (1.728)* | | | | (2.845)*** | (3.591) |
| 39 | 0.838 | -0.038 | 0.005 | 0.128 | -0.011 | 0.063 | | -0.012 | | | 0 | 3.962 |
| | (4.393)*** | (-0.353) | (0.078) | (2.147)** | (-0.245) | (1.505) | | (-0.723) | | | (2.85)*** | (3.778) |
| 40 | 0.823 | -0.025 | 0.007 | 0.127 | -0.015 | 0.061 | -3.951 | -0.012 | | | 0 | 4.098 |
| | (4.302)*** | (-0.223) | (0.105) | (2.138)** | (-0.33) | (1.46) | (1.783)* | (-0.723) | | | (2.874)*** | (3.888) |
| 41 | 0.766 | -0.011 | 0.01 | 0.124 | -0.014 | 0.062 | -3.486 | | | -16.883 | 0 | 3.935 |
| | (4.007)*** | (-0.096) | (0.152) | (2.019)** | (-0.313) | (1.44) | (1.743)* | | | (2.928)*** | (2.847)*** | (3.724) |
| 42 | 0.788 | 0.007 | 0.013 | 0.124 | -0.014 | 0.052 | | -0.012 | | -17.892 | 0 | 4.14 |
| | (4.136)*** | (0.059) | (0.192) | (2.023)** | (-0.3) | (1.219) | | (-0.722) | | (2.985)*** | (2.892)*** | (3.93) |
| 43 | 0.788 | 0.005 | 0.012 | 0.12 | -0.014 | 0.053 | -3.66 | -0.012 | | -17.361 | 0 | 4.251 |
| | (4.127)*** | (0.04) | (0.173) | (1.985)** | (-0.296) | (1.256) | (1.776)* | (-0.741) | | (2.949)*** | (2.878)*** | (4.015) |
| 44 | 0.765 | -0.009 | 0.012 | 0.128 | -0.014 | 0.061 | -3.397 | | -2.561 | -16.262 | 0 | 4.066 |
| | (3.962)*** | (-0.086) | (0.179) | (2.115)** | (-0.303) | (1.444) | (1.818)* | | (2.037)** | (3.051)*** | (2.828)*** | (3.83) |
| 45 | 0.789 | 0.006 | 0.016 | 0.127 | -0.012 | 0.053 | | -0.013 | -2.582 | -16.769 | 0 | 4.27 |
| | (4.088)*** | (0.053) | (0.236) | (2.115)** | (-0.273) | (1.264) | | (-0.786) | (2.093)** | (3.217)*** | (2.856)*** | (4.034) |
| 46 | 0.789 | 0.004 | 0.013 | 0.125 | -0.013 | 0.053 | -3.548 | -0.012 | -2.634 | -16.745 | 0 | 4.375 |
| | (4.09)*** | (0.04) | (0.192) | (2.093)** | (-0.292) | (1.276) | (1.845)* | (-0.79) | (2.051)** | (3.081)*** | (2.857)*** | (4.113) |

### 3.2.2 Newey-West t-statistics, controls

| # | $\hat{\lambda}_{\text{intercept}}$ | $\hat{\lambda}_{\beta_{MktRF}}$ | $\hat{\lambda}_{\beta_{SMB}}$ | $\hat{\lambda}_{\beta_{HML}}$ | $\hat{\lambda}_{\beta_{RMW}}$ | $\hat{\lambda}_{\beta_{CMA}}$ | $\hat{\lambda}_{\beta_{INDvw}}$ | $\hat{\lambda}_{\text{IINDvw}}$ | $\hat{\lambda}_{\beta_{MKTvw}}$ | $\hat{\lambda}_{\beta_{FIRMvw}}$ | $\hat{\lambda}_{\text{IFIRMvw}}$ | $\hat{\lambda}_{\text{ln.BM}}$ | $\hat{\lambda}_{\text{ln.ME}}$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.869 | -0.053 | | | | | | | | | | | |
| | (4.569)*** | (-0.416) | | | | | | | | | | | |
| 2 | 1.16 | 0.045 | | | | | -0.361 | | | | | 0.276 | -0.071 |
| | (3.534)*** | (0.376) | | | | | (-1.487) | | | | | (4.005)*** | (1.694)* |
| 3 | 0.977 | 0.015 | | | | | | -0.026 | | | | 0.347 | |
| | (4.94)*** | (0.123) | | | | | | (2.32)** | | | | (5.59)*** | |
| 4 | 1.415 | -0.036 | | | | | | -0.026 | | | | | -0.11 |
| | (4.281)*** | (-0.29) | | | | | | (2.44)** | | | | | (2.773)** |
| 5 | 1.297 | 0.015 | | | | | | -0.026 | | | | 0.264 | -0.076 |
| | (3.899)*** | (0.133) | | | | | | (2.441)** | | | | (3.91)*** | (1.809)* |
| 6 | 1.232 | 0.053 | | | | | -0.364 | -0.026 | | | | 0.282 | -0.071 |
| | (3.69)*** | (0.45) | | | | | (-1.502) | (2.487)** | | | | (4.133)*** | (1.701)* |
| 7 | 1.171 | 0.029 | | | | | -0.253 | | -2.302 | -2.388 | | 0.28 | -0.071 |
| | (3.653)*** | (0.262) | | | | | (-1.257) | | (1.942)* | (1.881)* | | (4.016)*** | (1.757)* |
| 8 | 1.272 | 0.026 | | | | | | -0.027 | -2.272 | -2.454 | | 0.287 | -0.072 |
| | (3.866)*** | (0.234) | | | | | | (2.575)** | (2.053)** | (1.972)** | | (4.147)*** | (1.778)* |
| 9 | 1.251 | 0.036 | | | | | -0.253 | -0.027 | -2.281 | -2.351 | | 0.287 | -0.071 |
| | (3.822)*** | (0.324) | | | | | (-1.266) | (2.577)** | (1.942)* | (1.869)* | | (4.158)*** | (1.771)* |
| 10 | 1.272 | 0.08 | | | | | -0.381 | | | | -0.001 | 0.262 | -0.089 |
| | (4.044)*** | (0.68) | | | | | (-1.574) | | | | (4.265)*** | (3.826)*** | (2.259)** |
| 11 | 1.398 | 0.051 | | | | | | -0.024 | | | -0.001 | 0.251 | -0.093 |
| | (4.433)*** | (0.446) | | | | | | (2.337)** | | | (4.183)*** | (3.786)*** | (2.376)** |
| 12 | 1.339 | 0.087 | | | | | -0.383 | -0.024 | | | -0.001 | 0.268 | -0.088 |
| | (4.189)*** | (0.749) | | | | | (-1.591) | (2.398)** | | | (4.198)*** | (3.966)*** | (2.25)** |
| 13 | 1.254 | 0.071 | | | | | -0.342 | | | -3.14 | -0.001 | 0.265 | -0.086 |
| | (4.01)*** | (0.624) | | | | | (-1.562) | | | (2.181)** | (4.309)*** | (3.845)*** | (2.209)** |
| 14 | 1.327 | 0.085 | | | | | | -0.025 | | -3.457 | -0.001 | 0.272 | -0.087 |
| | (4.179)*** | (0.724) | | | | | | (2.432)** | | (2.16)** | (4.202)*** | (3.992)*** | (2.221)** |
| 15 | 1.322 | 0.077 | | | | | -0.343 | -0.025 | | -3.119 | -0.001 | 0.271 | -0.085 |
| | (4.159)*** | (0.688) | | | | | (-1.576) | (2.44)** | | (2.184)** | (4.239)*** | (3.987)*** | (2.201)** |
| 16 | 1.263 | 0.061 | | | | | -0.27 | | -2.372 | -2.498 | -0.001 | 0.265 | -0.085 |
| | (4.08)*** | (0.556) | | | | | (-1.351) | | (2.023)** | (1.983)** | (4.254)*** | (3.837)*** | (2.23)** |
| 17 | 1.36 | 0.061 | | | | | | -0.025 | -2.362 | -2.591 | -0.001 | 0.273 | -0.087 |
| | (4.311)*** | (0.555) | | | | | | (2.483)** | (2.163)** | (2.103)** | (4.204)*** | (3.998)*** | (2.27)** |
| 18 | 1.338 | 0.066 | | | | | -0.27 | -0.025 | -2.351 | -2.465 | -0.001 | 0.272 | -0.085 |
| | (4.237)*** | (0.613) | | | | | (-1.362) | (2.497)** | (2.025)** | (1.978)** | (4.179)*** | (3.99)*** | (2.228)** |
| 19 | 0.804 | -0.048 | 0.021 | 0.154 | | | | | | | | | |
| | (4.361)*** | (-0.443) | (0.289) | (2.573)** | | | | | | | | | |
| 20 | 0.941 | 0.004 | 0.016 | 0.083 | | | | -0.025 | | | | 0.312 | |
| | (4.845)*** | (0.038) | (0.228) | (1.524) | | | | (2.319)** | | | | (5.253)*** | |
| 21 | 1.427 | 0.01 | -0.055 | 0.141 | | | | -0.027 | | | | | -0.116 |
| | (4.678)*** | (0.09) | (-0.89) | (2.391)** | | | | (2.533)** | | | | | (3.294)** |
| 22 | 1.31 | 0.037 | -0.03 | 0.082 | | | | -0.026 | | | | 0.24 | -0.083 |
| | (4.286)*** | (0.353) | (-0.517) | (1.559) | | | | (2.51)** | | | | (3.847)*** | (2.26)** |
| 23 | 1.265 | 0.066 | -0.016 | 0.069 | | | -0.329 | -0.026 | | | | 0.251 | -0.08 |
| | (4.128)*** | (0.629) | (-0.27) | (1.306) | | | (-1.523) | (2.527)** | | | | (3.999)*** | (2.207)** |
| 24 | 1.188 | 0.042 | -0.015 | 0.066 | | | -0.237 | | -2.328 | -2.311 | | 0.254 | -0.078 |
| | (3.965)*** | (0.405) | (-0.256) | (1.257) | | | (-1.277) | | (1.888)* | (1.857)* | | (3.992)*** | (2.144)** |
| 25 | 1.294 | 0.046 | -0.022 | 0.073 | | | | -0.027 | -2.439 | -2.47 | | 0.258 | -0.081 |
| | (4.246)*** | (0.444) | (-0.387) | (1.387) | | | | (2.579)** | (1.889)* | (1.852)* | | (4.083)*** | (2.254)** |
| 26 | 1.273 | 0.046 | -0.015 | 0.071 | | | -0.237 | -0.026 | -2.307 | -2.267 | | 0.26 | -0.078 |
| | (4.154)*** | (0.455) | (-0.271) | (1.375) | | | (-1.287) | (2.578)** | (1.891)* | (1.84)* | | (4.107)*** | (2.171)** |
| 27 | 1.256 | 0.086 | 0.01 | 0.059 | | | -0.348 | | | | -0.001 | 0.235 | -0.09 |
| | (4.31)*** | (0.808) | (0.184) | (1.109) | | | (-1.604) | | | | (4.273)*** | (3.744)*** | (2.583)** |
| 28 | 1.381 | 0.063 | -0.005 | 0.078 | | | | -0.024 | | | -0.001 | 0.23 | -0.093 |
| | (4.678)*** | (0.599) | (-0.089) | (1.501) | | | | (2.429)** | | | (4.173)*** | (3.709)*** | (2.661)** |
| 29 | 1.337 | 0.09 | 0.01 | 0.064 | | | -0.349 | -0.025 | | | -0.001 | 0.24 | -0.09 |
| | (4.499)*** | (0.86) | (0.173) | (1.219) | | | (-1.619) | (2.46)** | | | (4.186)*** | (3.852)*** | (2.596)** |
| 30 | 1.253 | 0.078 | 0.013 | 0.066 | | | -0.319 | | | -2.956 | -0.001 | 0.235 | -0.089 |
| | (4.303)*** | (0.75) | (0.236) | (1.242) | | | (-1.637) | | | (2.216)** | (4.293)*** | (3.711)*** | (2.574)** |
| 31 | 1.337 | 0.093 | 0.008 | 0.071 | | | | -0.025 | | -3.284 | -0.001 | 0.241 | -0.091 |
| | (4.527)*** | (0.871) | (0.147) | (1.33) | | | | (2.48)** | | (2.123)** | (4.192)*** | (3.838)*** | (2.63)*** |
| 32 | 1.332 | 0.081 | 0.012 | 0.072 | | | -0.318 | -0.024 | | -2.922 | -0.001 | 0.24 | -0.089 |
| | (4.484)*** | (0.797) | (0.222) | (1.365) | | | (1.654)* | (2.457)** | | (2.212)** | (4.205)*** | (3.829)*** | (2.579)** |
| 33 | 1.258 | 0.064 | 0.012 | 0.06 | | | -0.252 | | -2.38 | -2.41 | -0.001 | 0.243 | -0.087 |
| | (4.319)*** | (0.634) | (0.213) | (1.155) | | | (-1.367) | | (1.953)* | (1.951)* | (4.18)*** | (3.829)*** | (2.522)** |
| 34 | 1.361 | 0.069 | 0.003 | 0.067 | | | | -0.025 | -2.512 | -2.604 | -0.001 | 0.248 | -0.091 |
| | (4.606)*** | (0.679) | (0.06) | (1.291) | | | | (2.507)** | (1.969)** | (1.967)** | (4.15)*** | (3.947)*** | (2.628)** |
| 35 | 1.338 | 0.068 | 0.011 | 0.066 | | | -0.252 | -0.025 | -2.358 | -2.37 | -0.001 | 0.249 | -0.088 |
| | (4.5)*** | (0.679) | (0.197) | (1.283) | | | (-1.38) | (2.514)** | (1.958)* | (1.94)* | (4.093)*** | (3.953)*** | (2.53)** |
| 36 | 0.793 | -0.04 | 0.023 | 0.152 | -0.007 | 0.067 | | | | | | | |
| | (4.283)*** | (-0.376) | (0.32) | (2.594)*** | (-0.16) | (1.577) | | | | | | | |
| 37 | 0.934 | 0.012 | 0.016 | 0.08 | 0.008 | 0.025 | | -0.024 | | | | 0.318 | |
| | (4.808)*** | (0.116) | (0.239) | (1.504) | (0.18) | (0.616) | | (2.21)** | | | | (5.408)*** | |
| 38 | 1.424 | 0.019 | -0.056 | 0.135 | 0.017 | 0.051 | | -0.025 | | | | | -0.117 |
| | (4.673)*** | (0.175) | (-0.954) | (2.336)** | (0.398) | (1.206) | | (2.431)** | | | | | (3.372)** |
| 39 | 1.307 | 0.047 | -0.03 | 0.075 | 0.02 | 0.022 | | -0.024 | | | | 0.247 | -0.084 |
| | (4.268)*** | (0.456) | (-0.538) | (1.452) | (0.517) | (0.544) | | (2.403)** | | | | (3.959)*** | (2.294)** |
| 40 | 1.271 | 0.069 | -0.017 | 0.066 | 0.016 | 0.012 | -0.339 | -0.025 | | | | 0.253 | -0.081 |
| | (4.139)*** | (0.663) | (-0.308) | (1.275) | (0.404) | (0.306) | (-1.506) | (2.447)** | | | | (4.02)*** | (2.241)** |
| 41 | 1.211 | 0.044 | -0.017 | 0.062 | 0.021 | 0.021 | -0.249 | | -2.316 | -2.352 | | 0.255 | -0.081 |
| | (4.014)*** | (0.436) | (-0.303) | (1.205) | (0.551) | (0.546) | (-1.266) | | (1.853)* | (1.85)* | | (3.998)*** | (2.239)** |
| 42 | 1.303 | 0.052 | -0.023 | 0.068 | 0.019 | 0.022 | | -0.025 | -2.512 | -2.565 | | 0.26 | -0.083 |
| | (4.246)*** | (0.503) | (-0.416) | (1.334) | (0.488) | (0.574) | | (2.502)** | (1.886)* | (1.876)* | | (4.113)*** | (2.306)** |
| 43 | 1.296 | 0.047 | -0.018 | 0.068 | 0.02 | 0.019 | -0.247 | -0.025 | -2.294 | -2.304 | | 0.261 | -0.081 |
| | (4.203)*** | (0.466) | (-0.329) | (1.341) | (0.538) | (0.508) | (-1.272) | (2.521)** | (1.857)* | (1.835)* | | (4.124)*** | (2.259)** |
| 44 | 1.254 | 0.088 | 0.008 | 0.055 | 0.007 | 0.011 | -0.361 | | | | -0.001 | 0.237 | -0.089 |
| | (4.282)*** | (0.849) | (0.147) | (1.069) | (0.181) | (0.275) | (-1.588) | | | | (4.145)*** | (3.773)*** | (2.582)** |
| 45 | 1.374 | 0.07 | -0.005 | 0.071 | 0.011 | 0.019 | | -0.023 | | | -0.001 | 0.237 | -0.093 |
| | (4.632)*** | (0.682) | (-0.089) | (1.385) | (0.284) | (0.471) | | (2.356)** | | | (4.074)*** | (3.821)*** | (2.665)** |
| 46 | 1.335 | 0.091 | 0.007 | 0.061 | 0.007 | 0.009 | -0.357 | -0.024 | | | -0.001 | 0.243 | -0.09 |
| | (4.479)*** | (0.884) | (0.122) | (1.192) | (0.175) | (0.222) | (-1.594) | (2.409)** | | | (4.066)*** | (3.885)*** | (2.592)** |
| 47 | 1.257 | 0.081 | 0.01 | 0.063 | 0.007 | 0.014 | -0.347 | | | -3.08 | -0.001 | 0.238 | -0.089 |
| | (4.285)*** | (0.786) | (0.184) | (1.197) | (0.189) | (0.36) | (-1.574) | | | (2.149)** | (4.128)*** | (3.75)*** | (2.593)** |
| 48 | 1.336 | 0.093 | 0.005 | 0.068 | 0.005 | 0.013 | | -0.024 | | -3.288 | -0.001 | 0.245 | -0.091 |
| | (4.5)*** | (0.887) | (0.098) | (1.295) | (0.128) | (0.338) | | (2.429)** | | (2.13)** | (4.062)*** | (3.894)*** | (2.621)** |
| 49 | 1.337 | 0.083 | 0.008 | 0.069 | 0.007 | 0.012 | -0.344 | -0.024 | | -3.032 | -0.001 | 0.244 | -0.09 |
| | (4.475)*** | (0.817) | (0.158) | (1.329) | (0.182) | (0.321) | (-1.582) | (2.427)** | | (2.143)** | (4.049)*** | (3.874)*** | (2.599)** |
| 50 | 1.273 | 0.064 | 0.006 | 0.056 | 0.012 | 0.017 | -0.263 | | -2.358 | -2.444 | -0.001 | 0.244 | -0.089 |
| | (4.342)*** | (0.64) | (0.12) | (1.106) | (0.331) | (0.445) | (-1.347) | | (1.908)* | (1.938)* | (4.047)*** | (3.853)*** | (2.578)** |
| 51 | 1.362 | 0.073 | 0 | 0.063 | 0.01 | 0.018 | | -0.024 | -2.569 | -2.685 | -0.001 | 0.25 | -0.091 |
| | (4.578)*** | (0.715) | (0.001) | (1.24) | (0.269) | (0.474) | | (2.462)** | (1.955)* | (1.983)** | (4.023)*** | (3.98)*** | (2.643)** |
| 52 | 1.355 | 0.066 | 0.005 | 0.063 | 0.012 | 0.016 | -0.261 | -0.024 | -2.334 | -2.399 | -0.001 | 0.251 | -0.089 |
| | (4.527)*** | (0.667) | (0.092) | (1.25) | (0.317) | (0.417) | (-1.355) | (2.486)** | (1.914)* | (1.927)* | (3.969)*** | (3.985)*** | (2.584)** |

| # | $\hat{\lambda}_{\text{intercept}}$ | $\hat{\lambda}_{\beta_{MktRF}}$ | $\hat{\lambda}_{\beta_{SMB}}$ | $\hat{\lambda}_{\beta_{HML}}$ | $\hat{\lambda}_{\beta_{RMW}}$ | $\hat{\lambda}_{\beta_{CMA}}$ | $\hat{\lambda}_{\beta_{INDew}}$ | $\hat{\lambda}_{\text{IINDew}}$ | $\hat{\lambda}_{\beta_{MKTew}}$ | $\hat{\lambda}_{\beta_{FIRMew}}$ | $\hat{\lambda}_{\text{IFIRMew}}$ | $\hat{\lambda}_{\text{ln.BM}}$ | $\hat{\lambda}_{\text{ln.M}}$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.869 | -0.053 | | | | | | | | | | | |
| | (4.569)*** | (-0.416) | | | | | | | | | | | |
| 2 | 0.904 | 0 | | | | | -3.347 | | | | | 0.334 | |
| | (4.659)*** | (0.001) | | | | | (2.707)*** | | | | | (5.275)*** | |
| 3 | 1.347 | -0.041 | | | | | -3.668 | | | | | | -0.10 |
| | (4.1)*** | (-0.338) | | | | | (2.74)*** | | | | | | (2.74 |
| 4 | 1.231 | 0.007 | | | | | -3.499 | | | | | 0.251 | -0.07 |
| | (3.736)*** | (0.066) | | | | | (2.699)*** | | | | | (3.636)*** | (1.83 |
| 5 | 1.248 | 0.021 | | | | | | -0.018 | | | | 0.263 | -0.07 |
| | (3.811)*** | (0.183) | | | | | | (-1.091) | | | | (3.907)*** | (1.78 |
| 6 | 1.256 | 0.022 | | | | | -3.561 | -0.019 | | | | 0.257 | -0.07 |
| | (3.796)*** | (0.195) | | | | | (2.687)*** | (-1.173) | | | | (3.782)*** | (1.81 |
| 7 | 1.242 | 0.036 | | | | | -3.132 | | -1.522 | -10.551 | | 0.263 | -0.08 |
| | (3.767)*** | (0.325) | | | | | (2.894)*** | | (2.314)** | (3.092)*** | | (3.738)*** | (1.96 |
| 8 | 1.24 | 0.058 | | | | | | -0.018 | -1.808 | -12.251 | | 0.28 | -0.07 |
| | (3.78)*** | (0.502) | | | | | | (-1.146) | (2.088)** | (3.201)*** | | (4.045)*** | (1.87 |
| 9 | 1.273 | 0.048 | | | | | -3.13 | -0.019 | -1.581 | -11.011 | | 0.269 | -0.08 |
| | (3.837)*** | (0.439) | | | | | (2.857)*** | (-1.172) | (2.371)** | (3.195)*** | | (3.871)*** | (1.96 |
| 10 | 1.322 | 0.043 | | | | | -3.493 | | | | -0.001 | 0.237 | -0.09 |
| | (4.231)*** | (0.392) | | | | | (2.714)*** | | | | (4.166)*** | (3.498)*** | (2.36 |
| 11 | 1.344 | 0.058 | | | | | | -0.015 | | | -0.001 | 0.25 | -0.09 |
| | (4.324)*** | (0.505) | | | | | | (-0.9) | | | (4.186)*** | (3.781)*** | (2.32 |
| 12 | 1.345 | 0.057 | | | | | -3.553 | -0.016 | | | -0.001 | 0.244 | -0.09 |
| | (4.286)*** | (0.523) | | | | | (2.699)*** | (-0.994) | | | (4.149)*** | (3.65)*** | (2.33 |
| 13 | 1.294 | 0.071 | | | | | -3.443 | | | -10.584 | -0.001 | 0.251 | -0.09 |
| | (4.115)*** | (0.635) | | | | | (2.869)*** | | | (3.022)*** | (4.163)*** | (3.605)*** | (2.34 |
| 14 | 1.282 | 0.107 | | | | | | -0.016 | | -14.218 | -0.001 | 0.27 | -0.08 |
| | (4.119)*** | (0.882) | | | | | | (-0.973) | | (2.79)*** | (4.198)*** | (3.942)*** | (2.26 |
| 15 | 1.317 | 0.086 | | | | | -3.447 | -0.016 | | -11.018 | -0.001 | 0.258 | -0.09 |
| | (4.17)*** | (0.766) | | | | | (2.819)*** | (-0.978) | | (3.11)*** | (4.14)*** | (3.758)*** | (2.32 |
| 16 | 1.309 | 0.067 | | | | | -3.127 | | -1.596 | -10.127 | -0.001 | 0.252 | -0.09 |
| | (4.162)*** | (0.622) | | | | | (2.912)*** | | (2.442)** | (2.993)*** | (4.173)*** | (3.647)*** | (2.39 |
| 17 | 1.317 | 0.09 | | | | | | -0.016 | -1.883 | -11.814 | -0.001 | 0.269 | -0.09 |
| | (4.207)*** | (0.801) | | | | | | (-0.987) | (2.192)** | (3.105)*** | (4.209)*** | (3.955)*** | (2.32 |
| 18 | 1.337 | 0.08 | | | | | -3.123 | -0.016 | -1.656 | -10.592 | -0.001 | 0.259 | -0.09 |
| | (4.227)*** | (0.738) | | | | | (2.869)*** | (-1.024) | (2.497)** | (3.098)*** | (4.142)*** | (3.789)*** | (2.38 |
| 19 | 0.804 | -0.048 | 0.021 | 0.154 | | | | | | | | | |
| | (4.361)*** | (-0.443) | (0.289) | (2.573)** | | | | | | | | | |
| 20 | 0.895 | 0.01 | 0.018 | 0.079 | | | | -0.019 | | | | 0.311 | |
| | (4.693)*** | (0.092) | (0.242) | (1.449) | | | | (-1.163) | | | | (5.293)*** | |
| 21 | 1.373 | 0.015 | -0.054 | 0.137 | | | | -0.02 | | | | | -0.11 |
| | (4.58)*** | (0.138) | (-0.87) | (2.329)** | | | | (-1.212) | | | | | (3.25 |
| 22 | 1.255 | 0.043 | -0.029 | 0.078 | | | | -0.018 | | | | 0.24 | -0.08 |
| | (4.179)*** | (0.401) | (-0.486) | (1.484) | | | | (-1.144) | | | | (3.866)*** | (2.22 |
| 23 | 1.27 | 0.037 | -0.03 | 0.075 | | | -3.35 | -0.02 | | | | 0.244 | -0.08 |
| | (4.215)*** | (0.365) | (-0.511) | (1.453) | | | (2.573)** | (-1.271) | | | | (3.876)*** | (2.27 |
| 24 | 1.216 | 0.037 | -0.022 | 0.064 | | | -2.887 | | -1.398 | -10.302 | | 0.244 | -0.08 |
| | (4.027)*** | (0.369) | (-0.38) | (1.221) | | | (2.726)*** | | (2.235)** | (3.175)*** | | (3.809)*** | (2.27 |
| 25 | 1.231 | 0.057 | -0.022 | 0.067 | | | | -0.018 | -1.622 | -11.918 | | 0.252 | -0.08 |
| | (4.093)*** | (0.549) | (-0.375) | (1.27) | | | | (-1.157) | (2.03)** | (3.34)*** | | (4.008)*** | (2.21 |
| 26 | 1.247 | 0.046 | -0.021 | 0.067 | | | -2.881 | -0.019 | -1.452 | -10.763 | | 0.249 | -0.08 |
| | (4.115)*** | (0.463) | (-0.366) | (1.284) | | | (2.687)*** | (-1.2) | (2.283)** | (3.274)*** | | (3.924)*** | (2.26 |
| 27 | 1.303 | 0.051 | -0.007 | 0.068 | | | -3.283 | | | | -0.001 | 0.228 | -0.09 |
| | (4.482)*** | (0.512) | (-0.122) | (1.327) | | | (2.587)** | | | | (4.213)*** | (3.606)*** | (2.66 |
| 28 | 1.321 | 0.069 | -0.003 | 0.074 | | | | -0.015 | | | -0.001 | 0.23 | -0.09 |
| | (4.55)*** | (0.655) | (-0.053) | (1.418) | | | | (-0.959) | | | (4.19)*** | (3.725)*** | (2.6) |
| 29 | 1.332 | 0.063 | -0.005 | 0.07 | | | -3.344 | -0.017 | | | -0.001 | 0.234 | -0.09 |
| | (4.571)*** | (0.627) | (-0.098) | (1.369) | | | (2.576)** | (-1.094) | | | (4.178)*** | (3.734)*** | (2.64 |
| 30 | 1.259 | 0.077 | 0.004 | 0.06 | | | -3.175 | | | -10.096 | -0.001 | 0.236 | -0.09 |
| | (4.324)*** | (0.751) | (0.066) | (1.123) | | | (2.677)*** | | | (2.976)*** | (4.186)*** | (3.702)*** | (2.59 |
| 31 | 1.26 | 0.111 | 0.009 | 0.065 | | | | -0.016 | | -13.976 | -0.001 | 0.243 | -0.08 |
| | (4.355)*** | (0.995) | (0.157) | (1.2) | | | | (-1.008) | | (2.877)*** | (4.197)*** | (3.879)*** | (2.51 |
| 32 | 1.286 | 0.089 | 0.005 | 0.062 | | | -3.174 | -0.016 | | -10.55 | -0.001 | 0.241 | -0.09 |
| | (4.402)*** | (0.865) | (0.097) | (1.176) | | | (2.631)*** | (-1.057) | | (3.065)*** | (4.153)*** | (3.824)*** | (2.57 |
| 33 | 1.273 | 0.062 | 0.002 | 0.06 | | | -2.872 | | -1.48 | -9.856 | -0.001 | 0.233 | -0.09 |
| | (4.353)*** | (0.633) | (0.039) | (1.153) | | | (2.731)*** | | (2.376)** | (3.05)*** | (4.18)*** | (3.666)*** | (2.61 |
| 34 | 1.291 | 0.082 | 0.004 | 0.063 | | | | -0.015 | -1.7 | -11.463 | -0.001 | 0.241 | -0.08 |
| | (4.429)*** | (0.802) | (0.068) | (1.202) | | | | (-0.99) | (2.143)** | (3.221)*** | (4.221)*** | (3.873)*** | (2.56 |
| 35 | 1.301 | 0.071 | 0.003 | 0.063 | | | -2.863 | -0.016 | -1.534 | -10.327 | -0.001 | 0.239 | -0.09 |
| | (4.431)*** | (0.726) | (0.063) | (1.224) | | | (2.686)*** | (-1.043) | (2.422)** | (3.154)*** | (4.143)*** | (3.788)*** | (2.6) |
| 36 | 1.221 | 0.032 | -0.029 | 0.077 | | | | | | | | 0.235 | -0.08 |
| | (4.073)*** | (0.296) | (-0.487) | (1.465) | | | | | | | | (3.744)*** | (2.21 |
| 37 | 0.886 | 0.018 | 0.018 | 0.076 | 0.008 | 0.022 | | -0.016 | | | | 0.317 | |
| | (4.643)*** | (0.176) | (0.255) | (1.424) | (0.19) | (0.543) | | (-1.02) | | | | (5.447)*** | |
| 38 | 1.368 | 0.025 | -0.055 | 0.131 | 0.017 | 0.049 | | -0.017 | | | | | -0.11 |
| | (4.565)*** | (0.228) | (-0.932) | (2.27)** | (0.396) | (1.138) | | (-1.084) | | | | | (3.33 |
| 39 | 1.25 | 0.054 | -0.028 | 0.07 | 0.021 | 0.019 | | -0.016 | | | | 0.247 | -0.08 |
| | (4.152)*** | (0.51) | (-0.502) | (1.37) | (0.525) | (0.465) | | (-0.998) | | | | (3.974)*** | (2.25 |
| 40 | 1.266 | 0.049 | -0.029 | 0.067 | 0.024 | 0.021 | -3.256 | -0.017 | | | | 0.25 | -0.08 |
| | (4.189)*** | (0.494) | (-0.527) | (1.329) | (0.622) | (0.519) | (2.462)** | (-1.135) | | | | (3.959)*** | (2.30 |
| 41 | 1.212 | 0.048 | -0.02 | 0.056 | 0.024 | 0.017 | -2.655 | | -1.505 | -10.365 | | 0.25 | -0.08 |
| | (4.006)*** | (0.493) | (-0.364) | (1.11) | (0.637) | (0.434) | (2.467)** | | (2.342)** | (3.219)*** | | (3.918)*** | (2.29 |
| 42 | 1.223 | 0.067 | -0.02 | 0.06 | 0.021 | 0.011 | | -0.017 | -1.717 | -12.061 | | 0.258 | -0.08 |
| | (4.053)*** | (0.658) | (-0.348) | (1.166) | (0.551) | (0.28) | | (-1.099) | (2.134)** | (3.431)*** | | (4.116)*** | (2.23 |
| 43 | 1.242 | 0.056 | -0.02 | 0.059 | 0.023 | 0.013 | -2.656 | -0.018 | -1.546 | -10.689 | | 0.255 | -0.08 |
| | (4.095)*** | (0.574) | (-0.363) | (1.18) | (0.62) | (0.326) | (2.447)** | (-1.167) | (2.379)** | (3.293)*** | | (4.033)*** | (2.28 |
| 44 | 1.298 | 0.062 | -0.007 | 0.06 | 0.015 | 0.022 | -3.176 | | | | -0.001 | 0.234 | -0.09 |
| | (4.444)*** | (0.63) | (-0.122) | (1.186) | (0.399) | (0.558) | (2.464)** | | | | (4.161)*** | (3.696)*** | (2.66 |
| 45 | 1.311 | 0.078 | -0.003 | 0.066 | 0.012 | 0.015 | | -0.013 | | | -0.001 | 0.237 | -0.09 |
| | (4.496)*** | (0.744) | (-0.053) | (1.296) | (0.302) | (0.386) | | (-0.848) | | | (4.09)*** | (3.834)*** | (2.60 |
| 46 | 1.324 | 0.072 | -0.006 | 0.061 | 0.016 | 0.017 | -3.222 | -0.015 | | | -0.001 | 0.239 | -0.09 |
| | (4.526)*** | (0.733) | (-0.103) | (1.236) | (0.408) | (0.427) | (2.464)** | (-0.989) | | | (4.111)*** | (3.817)*** | (2.64 |
| 47 | 1.255 | 0.087 | 0.002 | 0.051 | 0.013 | 0.015 | -3.011 | | | -10.528 | -0.001 | 0.241 | -0.09 |
| | (4.294)*** | (0.854) | (0.031) | (0.997) | (0.327) | (0.374) | (2.397)** | | | (3.067)*** | (4.114)*** | (3.793)*** | (2.60 |
| 48 | 1.256 | 0.113 | 0.007 | 0.058 | 0.008 | 0.008 | | -0.014 | | -14.014 | -0.001 | 0.248 | -0.08 |
| | (4.319)*** | (1.045) | (0.134) | (1.115) | (0.206) | (0.198) | | (-0.921) | | (3.013)*** | (4.085)*** | (3.965)*** | (2.52 |
| 49 | 1.282 | 0.096 | 0.003 | 0.054 | 0.012 | 0.01 | -3.007 | -0.015 | | -10.836 | -0.001 | 0.246 | -0.09 |
| | (4.376)*** | (0.951) | (0.053) | (1.06) | (0.316) | (0.256) | (2.364)** | (-1.008) | | (3.128)*** | (4.069)*** | (3.912)*** | (2.58 |
| 50 | 1.266 | 0.071 | 0.003 | 0.052 | 0.016 | 0.013 | -2.614 | | -1.583 | -9.964 | -0.001 | 0.24 | -0.09 |
| | (4.309)*** | (0.735) | (0.057) | (1.025) | (0.435) | (0.33) | (2.464)** | | (2.477)** | (3.106)*** | (4.085)*** | (3.779)*** | (2.61 |
| 51 | 1.279 | 0.09 | 0.005 | 0.055 | 0.013 | 0.007 | | -0.014 | -1.788 | -11.637 | -0.001 | 0.248 | -0.08 |
| | (4.364)*** | (0.891) | (0.096) | (1.084) | (0.343) | (0.182) | | (-0.96) | (2.239)** | (3.32)*** | (4.104)*** | (3.984)*** | (2.55 |
| 52 | 1.294 | 0.079 | 0.004 | 0.055 | 0.016 | 0.009 | -2.615 | -0.015 | -1.624 | -10.296 | -0.001 | 0.245 | -0.09 |
| | (4.393)*** | (0.817) | (0.067) | (1.102) | (0.418) | (0.229) | (2.441)** | (-1.034) | (2.513)** | (3.184)*** | (4.039)*** | (3.898)*** | (2.59 |

## 3.3 Hoberg-Phillips FIC-25 industries

### 3.3.1 Newey-West t-statistics

| # | $\hat{\lambda}_{\text{intercept}}$ | $\hat{\lambda}_{\beta_{MktRF}}$ | $\hat{\lambda}_{\beta_{SMB}}$ | $\hat{\lambda}_{\beta_{HML}}$ | $\hat{\lambda}_{\beta_{RMW}}$ | $\hat{\lambda}_{\beta_{CMA}}$ | $\hat{\lambda}_{\beta_{INDvw}}$ | $\hat{\lambda}_{\text{IINDvw}}$ | $\hat{\lambda}_{\beta_{MKTvw}}$ | $\hat{\lambda}_{\beta_{FIRMvw}}$ | $\hat{\lambda}_{\text{IFIRMvw}}$ | $R^2$, $\bar{R}^2$ (in %) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.856 | 0.24 | | | | | | | | | | 1.674 |
| | (1.995)** | (0.875) | | | | | | | | | | (1.641) |
| 2 | 0.826 | 0.275 | | | | | -1.8 | | | | | 1.873 |
| | (1.919)* | (0.969) | | | | | (-1.38) | | | | | (1.808) |
| 3 | 0.924 | 0.237 | | | | | | 0.002 | | | | 1.927 |
| | (2.212)** | (0.885) | | | | | | (0.186) | | | | (1.862) |
| 4 | 0.88 | 0.273 | | | | | -1.792 | 0.003 | | | | 2.118 |
| | (2.102)** | (0.978) | | | | | (-1.387) | (0.223) | | | | (2.021) |
| 5 | 0.763 | 0.257 | | | | | -1.6 | | -8.321 | -5.565 | | 2.171 |
| | (1.81)* | (0.934) | | | | | (-1.309) | | (-1.648) | (-1.547) | | (2.042) |
| 6 | 0.855 | 0.247 | | | | | | 0.003 | -8.112 | -5.394 | | 2.297 |
| | (2.057)** | (0.92) | | | | | | (0.202) | (-1.609) | (-1.51) | | (2.168) |
| 7 | 0.809 | 0.253 | | | | | -1.604 | 0.003 | -8.266 | -5.564 | | 2.411 |
| | (1.97)** | (0.935) | | | | | (-1.319) | (0.238) | (-1.64) | (-1.553) | | (2.25) |
| 8 | 0.846 | 0.283 | | | | | -1.856 | | | | 0 | 2.361 |
| | (1.991)** | (1) | | | | | (-1.423) | | | | (-0.579) | (2.264) |
| 9 | 0.945 | 0.248 | | | | | | 0.002 | | | 0 | 2.411 |
| | (2.286)** | (0.933) | | | | | | (0.116) | | | (-0.58) | (2.314) |
| 10 | 0.905 | 0.281 | | | | | -1.848 | 0.002 | | | 0 | 2.601 |
| | (2.186)** | (1.015) | | | | | (-1.432) | (0.153) | | | (-0.592) | (2.473) |
| 11 | 0.798 | 0.288 | | | | | -1.962 | | | -6.671 | 0 | 2.52 |
| | (1.9)* | (1.022) | | | | | (-1.49) | | | (1.71)* | (-0.602) | (2.391) |
| 12 | 0.874 | 0.296 | | | | | | 0.002 | | -6.662 | 0 | 2.619 |
| | (2.125)** | (1.06) | | | | | | (0.176) | | (1.722)* | (-0.65) | (2.49) |
| 13 | 0.844 | 0.286 | | | | | -1.971 | 0.003 | | -6.691 | 0 | 2.759 |
| | (2.067)** | (1.034) | | | | | (-1.506) | (0.219) | | (1.724)* | (-0.612) | (2.598) |
| 14 | 0.784 | 0.266 | | | | | -1.673 | | -8.543 | -5.795 | 0 | 2.644 |
| | (1.88)* | (0.972) | | | | | (-1.368) | | (1.697)* | (-1.615) | (-0.649) | (2.483) |
| 15 | 0.881 | 0.256 | | | | | | 0.002 | -8.329 | -5.61 | 0 | 2.765 |
| | (2.139)** | (0.963) | | | | | | (0.154) | (1.666)* | (-1.58) | (-0.709) | (2.604) |
| 16 | 0.834 | 0.263 | | | | | -1.675 | 0.002 | -8.48 | -5.787 | 0 | 2.879 |
| | (2.05)** | (0.978) | | | | | (-1.38) | (0.182) | (1.692)* | (-1.624) | (-0.661) | (2.687) |
| 17 | 0.838 | 0.289 | -0.002 | 0.142 | | | | | | | | 2.116 |
| | (2.031)** | (1.076) | (-0.028) | (1.246) | | | | | | | | (2.019) |
| 18 | 0.924 | 0.28 | -0.003 | 0.152 | | | | 0.001 | | | | 2.351 |
| | (2.311)** | (1.066) | (-0.04) | (1.369) | | | | (0.109) | | | | (2.222) |
| 19 | 0.879 | 0.313 | 0.005 | 0.155 | | | -1.746 | 0.002 | | | | 2.536 |
| | (2.206)** | (1.157) | (0.064) | (1.356) | | | (-1.358) | (0.174) | | | | (2.375) |
| 20 | 0.814 | 0.277 | 0.03 | 0.174 | | | -1.605 | | -8.446 | -5.557 | | 2.59 |
| | (1.986)** | (1.061) | (0.342) | (1.47) | | | (-1.308) | | (-1.642) | (-1.513) | | (2.396) |
| 21 | 0.905 | 0.28 | 0.006 | 0.161 | | | | 0.002 | -8.197 | -5.228 | | 2.69 |
| | (2.272)** | (1.082) | (0.071) | (1.466) | | | | (0.149) | (-1.63) | (-1.476) | | (2.497) |
| 22 | 0.88 | 0.269 | 0.029 | 0.183 | | | -1.594 | 0.002 | -8.331 | -5.523 | | 2.815 |
| | (2.212)** | (1.048) | (0.337) | (1.581) | | | (-1.318) | (0.164) | (-1.641) | (-1.525) | | (2.591) |
| 23 | 0.829 | 0.328 | 0.006 | 0.15 | | | -1.82 | | | | 0 | 2.791 |
| | (2.043)** | (1.196) | (0.075) | (1.285) | | | (-1.393) | | | | (-0.489) | (2.63) |
| 24 | 0.941 | 0.292 | -0.002 | 0.155 | | | | 0.001 | | | 0 | 2.831 |
| | (2.381)** | (1.114) | (-0.021) | (1.401) | | | | (0.056) | | | (-0.515) | (2.67) |
| 25 | 0.898 | 0.321 | 0.006 | 0.157 | | | -1.805 | 0.001 | | | 0 | 3.016 |
| | (2.281)** | (1.193) | (0.078) | (1.379) | | | (-1.403) | (0.116) | | | (-0.499) | (2.823) |
| 26 | 0.804 | 0.309 | 0.035 | 0.172 | | | -1.978 | | | -6.826 | 0 | 2.94 |
| | (1.986)** | (1.144) | (0.413) | (1.412) | | | (-1.488) | | | (1.711)* | (-0.54) | (2.748) |
| 27 | 0.886 | 0.326 | 0.014 | 0.161 | | | | 0.002 | | -6.547 | 0 | 3.024 |
| | (2.265)** | (1.21) | (0.17) | (1.403) | | | | (0.137) | | (1.693)* | (-0.565) | (2.832) |
| 28 | 0.868 | 0.303 | 0.035 | 0.181 | | | -1.97 | 0.002 | | -6.799 | 0 | 3.164 |
| | (2.217)** | (1.139) | (0.423) | (1.506) | | | (-1.503) | (0.139) | | (1.729)* | (-0.55) | (2.939) |
| 29 | 0.831 | 0.286 | 0.032 | 0.174 | | | -1.67 | | -8.651 | -5.766 | 0 | 3.054 |
| | (2.045)** | (1.097) | (0.379) | (1.484) | | | (-1.359) | | (1.686)* | (-1.572) | (-0.556) | (2.83) |
| 30 | 0.923 | 0.288 | 0.01 | 0.162 | | | | 0.001 | -8.404 | -5.428 | 0 | 3.152 |
| | (2.34)** | (1.12) | (0.119) | (1.482) | | | | (0.118) | (1.682)* | (-1.539) | (-0.606) | (2.928) |
| 31 | 0.898 | 0.278 | 0.032 | 0.183 | | | -1.657 | 0.002 | -8.526 | -5.724 | 0 | 3.276 |
| | (2.279)** | (1.088) | (0.379) | (1.588) | | | (-1.372) | (0.124) | (1.688)* | (-1.588) | (-0.567) | (3.02) |
| 32 | 0.814 | 0.281 | 0.007 | 0.157 | -0.077 | -0.03 | | | | | | 2.471 |
| | (1.971)** | (1.061) | (0.096) | (1.397) | (-0.597) | (-0.447) | | | | | | (2.31) |
| 33 | 0.896 | 0.273 | 0.008 | 0.167 | -0.071 | -0.027 | | 0.001 | | | | 2.696 |
| | (2.228)** | (1.053) | (0.109) | (1.513) | (-0.57) | (-0.413) | | (0.109) | | | | (2.503) |
| 34 | 0.852 | 0.31 | 0.018 | 0.168 | -0.086 | -0.03 | -1.952 | 0.002 | | | | 2.873 |
| | (2.119)** | (1.153) | (0.24) | (1.486) | (-0.669) | (-0.466) | (-1.449) | (0.169) | | | | (2.649) |
| 35 | 0.808 | 0.283 | 0.021 | 0.174 | -0.058 | -0.014 | -1.684 | | -8.47 | -5.656 | | 2.886 |
| | (1.947)* | (1.079) | (0.262) | (1.543) | (-0.474) | (-0.23) | (-1.341) | | (-1.635) | (-1.517) | | (2.629) |
| 36 | 0.887 | 0.277 | 0.007 | 0.173 | -0.058 | -0.014 | | 0.002 | -8.216 | -5.306 | | 3.001 |
| | (2.2)** | (1.073) | (0.099) | (1.613) | (-0.478) | (-0.237) | | (0.123) | (-1.628) | (-1.474) | | (2.744) |
| 37 | 0.877 | 0.275 | 0.021 | 0.182 | -0.054 | -0.012 | -1.672 | 0.002 | -8.346 | -5.61 | | 3.107 |
| | (2.171)** | (1.069) | (0.276) | (1.648) | (-0.448) | (-0.192) | (-1.351) | (0.122) | (-1.634) | (-1.529) | | (2.818) |
| 38 | 0.808 | 0.321 | 0.015 | 0.163 | -0.093 | -0.031 | -2.028 | | | | 0 | 3.111 |
| | (1.976)** | (1.175) | (0.197) | (1.417) | (-0.714) | (-0.46) | (-1.483) | | | | (-0.414) | (2.887) |
| 39 | 0.916 | 0.281 | 0.007 | 0.169 | -0.075 | -0.026 | | 0.001 | | | 0 | 3.153 |
| | (2.306)** | (1.085) | (0.099) | (1.543) | (-0.606) | (-0.392) | | (0.068) | | | (-0.471) | (2.929) |
| 40 | 0.874 | 0.315 | 0.017 | 0.17 | -0.089 | -0.029 | -2.015 | 0.002 | | | 0 | 3.331 |
| | (2.201)** | (1.173) | (0.226) | (1.511) | (-0.7) | (-0.445) | (-1.496) | (0.121) | | | (-0.424) | (3.075) |
| 41 | 0.795 | 0.314 | 0.028 | 0.173 | -0.083 | -0.034 | -2.095 | | | -7.007 | 0 | 3.22 |
| | (1.943)* | (1.156) | (0.366) | (1.459) | (-0.66) | (-0.499) | (-1.528) | | | (1.716)* | (-0.426) | (2.964) |
| 42 | 0.867 | 0.32 | 0.018 | 0.174 | -0.089 | -0.029 | | 0.002 | | -6.686 | 0 | 3.337 |
| | (2.194)** | (1.19) | (0.246) | (1.522) | (-0.712) | (-0.452) | | (0.124) | | (1.681)* | (-0.483) | (3.081) |
| 43 | 0.862 | 0.308 | 0.03 | 0.18 | -0.079 | -0.032 | -2.085 | 0.001 | | -6.972 | 0 | 3.439 |
| | (2.17)** | (1.153) | (0.396) | (1.548) | (-0.646) | (-0.48) | (-1.543) | (0.114) | | (1.733)* | (-0.435) | (3.151) |
| 44 | 0.827 | 0.287 | 0.021 | 0.174 | -0.062 | -0.014 | -1.747 | | -8.625 | -5.848 | 0 | 3.334 |
| | (2.013)** | (1.099) | (0.272) | (1.557) | (-0.513) | (-0.22) | (-1.388) | | (1.668)* | (-1.571) | (-0.453) | (3.046) |
| 45 | 0.909 | 0.282 | 0.009 | 0.174 | -0.062 | -0.013 | | 0.001 | -8.392 | -5.507 | 0 | 3.446 |
| | (2.277)** | (1.098) | (0.12) | (1.625) | (-0.519) | (-0.224) | | (0.092) | (1.672)* | (-1.535) | (-0.518) | (3.159) |
| 46 | 0.898 | 0.28 | 0.022 | 0.182 | -0.058 | -0.011 | -1.733 | 0.001 | -8.492 | -5.796 | 0 | 3.551 |
| | (2.244)** | (1.093) | (0.29) | (1.656)* | (-0.492) | (-0.182) | (-1.402) | (0.084) | (1.671)* | (-1.586) | (-0.461) | (3.232) |

| # | $\hat{\lambda}_{\text{intercept}}$ | $\hat{\lambda}_{\beta_{MktRF}}$ | $\hat{\lambda}_{\beta_{SMB}}$ | $\hat{\lambda}_{\beta_{HML}}$ | $\hat{\lambda}_{\beta_{RMW}}$ | $\hat{\lambda}_{\beta_{CMA}}$ | $\hat{\lambda}_{\beta_{INDew}}$ | $\hat{\lambda}_{\text{IINDew}}$ | $\hat{\lambda}_{\beta_{MKTew}}$ | $\hat{\lambda}_{\beta_{FIRMew}}$ | $\hat{\lambda}_{\text{IFIRMew}}$ | $R^2$, $\bar{R}^2$ (in %) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.856 | 0.24 | | | | | | | | | | 1.674 |
| | (1.995)** | (0.875) | | | | | | | | | | (1.641) |
| 2 | 0.784 | 0.319 | | | | | -0.827 | | | | | 1.9 |
| | (1.822)* | (1.066) | | | | | (-1.641) | | | | | (1.836) |
| 3 | 0.901 | 0.244 | | | | | | -0.004 | | | | 2.004 |
| | (2.205)** | (0.901) | | | | | | (-0.218) | | | | (1.939) |
| 4 | 0.831 | 0.323 | | | | | -0.838 | -0.004 | | | | 2.224 |
| | (2.028)** | (1.092) | | | | | (1.655)* | (-0.234) | | | | (2.127) |
| 5 | 0.743 | 0.313 | | | | | -0.68 | | -6.629 | -23.499 | | 2.192 |
| | (1.746)* | (1.081) | | | | | (-1.446) | | (-1.57) | (-1.558) | | (2.063) |
| 6 | 0.833 | 0.302 | | | | | | -0.005 | -6.793 | -24.841 | | 2.354 |
| | (2.034)** | (1.058) | | | | | | (-0.248) | (-1.585) | (-1.615) | | (2.225) |
| 7 | 0.784 | 0.317 | | | | | -0.691 | -0.005 | -6.722 | -23.703 | | 2.502 |
| | (1.929)* | (1.107) | | | | | (-1.457) | (-0.279) | (-1.585) | (-1.556) | | (2.341) |
| 8 | 0.802 | 0.328 | | | | | -0.851 | | | | 0 | 2.388 |
| | (1.886)* | (1.102) | | | | | (1.678)* | | | | (-0.578) | (2.292) |
| 9 | 0.926 | 0.255 | | | | | | -0.006 | | | 0 | 2.482 |
| | (2.292)** | (0.945) | | | | | | (-0.318) | | | (-0.511) | (2.386) |
| 10 | 0.86 | 0.332 | | | | | -0.862 | -0.006 | | | 0 | 2.704 |
| | (2.129)** | (1.13) | | | | | (1.69)* | (-0.338) | | | (-0.551) | (2.576) |
| 11 | 0.778 | 0.342 | | | | | -0.807 | | | -28.253 | 0 | 2.53 |
| | (1.83)* | (1.151) | | | | | (-1.579) | | | (1.695)* | (-0.55) | (2.402) |
| 12 | 0.864 | 0.323 | | | | | | -0.007 | | -26.902 | 0 | 2.669 |
| | (2.14)** | (1.105) | | | | | | (-0.363) | | (1.707)* | (-0.544) | (2.54) |
| 13 | 0.836 | 0.346 | | | | | -0.814 | -0.007 | | -28.293 | 0 | 2.84 |
| | (2.064)** | (1.178) | | | | | (-1.583) | (-0.383) | | (1.688)* | (-0.52) | (2.679) |
| 14 | 0.76 | 0.321 | | | | | -0.707 | | -6.827 | -24.483 | 0 | 2.669 |
| | (1.803)* | (1.114) | | | | | (-1.497) | | (-1.621) | (-1.609) | (-0.586) | (2.509) |
| 15 | 0.86 | 0.312 | | | | | | -0.006 | -7.018 | -25.857 | 0 | 2.826 |
| | (2.124)** | (1.099) | | | | | | (-0.347) | (-1.64) | (1.663)* | (-0.554) | (2.666) |
| 16 | 0.812 | 0.325 | | | | | -0.718 | -0.007 | -6.924 | -24.651 | 0 | 2.973 |
| | (2.022)** | (1.14) | | | | | (-1.505) | (-0.364) | (-1.637) | (-1.605) | (-0.558) | (2.781) |
| 17 | 0.838 | 0.289 | -0.002 | 0.142 | | | | | | | | 2.116 |
| | (2.031)** | (1.076) | (-0.028) | (1.246) | | | | | | | | (2.019) |
| 18 | 0.888 | 0.287 | 0 | 0.133 | | | | -0.005 | | | | 2.433 |
| | (2.261)** | (1.073) | (-0.005) | (1.198) | | | | (-0.279) | | | | (2.304) |
| 19 | 0.823 | 0.351 | 0.021 | 0.144 | | | -0.814 | -0.005 | | | | 2.648 |
| | (2.102)** | (1.219) | (0.236) | (1.219) | | | (-1.605) | (-0.276) | | | | (2.487) |
| 20 | 0.769 | 0.337 | 0.021 | 0.163 | | | -0.641 | | -6.539 | -21.489 | | 2.582 |
| | (1.86)* | (1.19) | (0.231) | (1.394) | | | (-1.374) | | (-1.563) | (-1.437) | | (2.389) |
| 21 | 0.839 | 0.319 | 0.03 | 0.152 | | | | -0.005 | -6.712 | -23.378 | | 2.734 |
| | (2.139)** | (1.141) | (0.331) | (1.363) | | | | (-0.269) | (-1.559) | (-1.497) | | (2.541) |
| 22 | 0.813 | 0.334 | 0.023 | 0.156 | | | -0.652 | -0.006 | -6.598 | -21.797 | | 2.879 |
| | (2.054)** | (1.187) | (0.26) | (1.369) | | | (-1.388) | (-0.345) | (-1.571) | (-1.446) | | (2.655) |
| 23 | 0.789 | 0.363 | 0.019 | 0.156 | | | -0.828 | | | | 0 | 2.82 |
| | (1.946)* | (1.257) | (0.217) | (1.298) | | | (-1.625) | | | | (-0.497) | (2.659) |
| 24 | 0.908 | 0.298 | 0.001 | 0.136 | | | | -0.006 | | | 0 | 2.908 |
| | (2.34)** | (1.117) | (0.013) | (1.232) | | | | (-0.36) | | | (-0.451) | (2.747) |
| 25 | 0.847 | 0.36 | 0.022 | 0.145 | | | -0.839 | -0.006 | | | 0 | 3.125 |
| | (2.192)** | (1.256) | (0.253) | (1.242) | | | (-1.638) | (-0.359) | | | (-0.472) | (2.933) |
| 26 | 0.763 | 0.379 | 0.023 | 0.155 | | | -0.795 | | | -27.251 | 0 | 2.948 |
| | (1.875)* | (1.294) | (0.261) | (1.313) | | | (-1.541) | | | (-1.623) | (-0.47) | (2.755) |
| 27 | 0.86 | 0.351 | 0.012 | 0.143 | | | | -0.007 | | -26.165 | 0 | 3.086 |
| | (2.233)** | (1.212) | (0.145) | (1.25) | | | | (-0.368) | | (-1.608) | (-0.46) | (2.894) |
| 28 | 0.817 | 0.376 | 0.026 | 0.146 | | | -0.802 | -0.007 | | -27.429 | 0 | 3.243 |
| | (2.101)** | (1.292) | (0.294) | (1.269) | | | (-1.548) | (-0.39) | | (-1.626) | (-0.444) | (3.019) |
| 29 | 0.781 | 0.344 | 0.024 | 0.166 | | | -0.67 | | -6.741 | -22.504 | 0 | 3.054 |
| | (1.904)* | (1.219) | (0.271) | (1.427) | | | (-1.423) | | (-1.612) | (-1.487) | (-0.501) | (2.83) |
| 30 | 0.86 | 0.328 | 0.032 | 0.155 | | | | -0.006 | -6.929 | -24.337 | 0 | 3.201 |
| | (2.218)** | (1.175) | (0.365) | (1.397) | | | | (-0.347) | (-1.61) | (-1.541) | (-0.473) | (2.977) |
| 31 | 0.834 | 0.342 | 0.027 | 0.158 | | | -0.68 | -0.007 | -6.803 | -22.786 | 0 | 3.345 |
| | (2.13)** | (1.217) | (0.305) | (1.397) | | | (-1.435) | (-0.41) | (-1.621) | (-1.494) | (-0.476) | (3.09) |
| 32 | 0.814 | 0.281 | 0.007 | 0.157 | -0.077 | -0.03 | | | | | | 2.471 |
| | (1.971)** | (1.061) | (0.096) | (1.397) | (-0.597) | (-0.447) | | | | | | (2.31) |
| 33 | 0.873 | 0.279 | 0.009 | 0.148 | -0.081 | -0.039 | | -0.008 | | | | 2.757 |
| | (2.207)** | (1.06) | (0.121) | (1.351) | (-0.642) | (-0.605) | | (-0.423) | | | | (2.564) |
| 34 | 0.816 | 0.341 | 0.026 | 0.154 | -0.097 | -0.05 | -0.843 | -0.008 | | | | 2.955 |
| | (2.063)** | (1.209) | (0.332) | (1.333) | (-0.744) | (-0.748) | (-1.629) | (-0.422) | | | | (2.73) |
| 35 | 0.754 | 0.335 | 0.019 | 0.175 | -0.071 | -0.026 | -0.675 | | -6.987 | -22.619 | | 2.879 |
| | (1.821)* | (1.185) | (0.234) | (1.543) | (-0.546) | (-0.405) | (-1.372) | | (-1.583) | (-1.402) | | (2.622) |
| 36 | 0.828 | 0.317 | 0.033 | 0.164 | -0.08 | -0.036 | | -0.008 | -6.973 | -24.19 | | 3.018 |
| | (2.085)** | (1.144) | (0.409) | (1.502) | (-0.636) | (-0.574) | | (-0.442) | (-1.581) | (-1.489) | | (2.761) |
| 37 | 0.807 | 0.333 | 0.021 | 0.167 | -0.075 | -0.035 | -0.687 | -0.009 | -7.045 | -22.942 | | 3.158 |
| | (2.027)** | (1.187) | (0.265) | (1.516) | (-0.592) | (-0.551) | (-1.387) | (-0.49) | (-1.59) | (-1.412) | | (2.87) |
| 38 | 0.777 | 0.348 | 0.023 | 0.166 | -0.096 | -0.039 | -0.857 | | | | 0 | 3.131 |
| | (1.905)* | (1.229) | (0.29) | (1.41) | (-0.728) | (-0.57) | (1.653)* | | | | (-0.432) | (2.907) |
| 39 | 0.895 | 0.287 | 0.008 | 0.15 | -0.085 | -0.038 | | -0.009 | | | 0 | 3.21 |
| | (2.293)** | (1.09) | (0.113) | (1.383) | (-0.678) | (-0.582) | | (-0.487) | | | (-0.412) | (2.986) |
| 40 | 0.841 | 0.347 | 0.025 | 0.156 | -0.1 | -0.048 | -0.867 | -0.009 | | | 0 | 3.41 |
| | (2.157)** | (1.231) | (0.326) | (1.359) | (-0.776) | (-0.728) | (1.664)* | (-0.495) | | | (-0.409) | (3.154) |
| 41 | 0.756 | 0.359 | 0.025 | 0.166 | -0.096 | -0.043 | -0.81 | | | -27.752 | 0 | 3.248 |
| | (1.855)* | (1.247) | (0.318) | (1.448) | (-0.74) | (-0.635) | (-1.554) | | | (-1.616) | (-0.423) | (2.992) |
| 42 | 0.849 | 0.335 | 0.018 | 0.159 | -0.094 | -0.044 | | -0.009 | | -27.344 | 0 | 3.375 |
| | (2.181)** | (1.181) | (0.237) | (1.4) | (-0.737) | (-0.671) | | (-0.493) | | (-1.612) | (-0.412) | (3.12) |
| 43 | 0.818 | 0.357 | 0.028 | 0.157 | -0.101 | -0.051 | -0.817 | -0.009 | | -27.919 | 0 | 3.522 |
| | (2.09)** | (1.249) | (0.354) | (1.407) | (-0.788) | (-0.787) | (-1.563) | (-0.522) | | (-1.62) | (-0.399) | (3.234) |
| 44 | 0.77 | 0.34 | 0.021 | 0.177 | -0.073 | -0.025 | -0.703 | | -7.167 | -23.531 | 0 | 3.334 |
| | (1.876)* | (1.205) | (0.262) | (1.576) | (-0.575) | (-0.384) | (-1.419) | | (-1.625) | (-1.447) | (-0.447) | (3.046) |
| 45 | 0.851 | 0.324 | 0.033 | 0.166 | -0.083 | -0.035 | | -0.009 | -7.161 | -25.055 | 0 | 3.469 |
| | (2.169)** | (1.171) | (0.418) | (1.532) | (-0.669) | (-0.555) | | (-0.513) | (-1.625) | (-1.53) | (-0.416) | (3.182) |
| 46 | 0.83 | 0.339 | 0.024 | 0.169 | -0.078 | -0.033 | -0.714 | -0.01 | -7.226 | -23.826 | 0 | 3.608 |
| | (2.108)** | (1.208) | (0.297) | (1.544) | (-0.624) | (-0.529) | (-1.431) | (-0.552) | (-1.633) | (-1.455) | (-0.423) | (3.289) |

### 3.3.2 Newey-West t-statistics, controls

| # | $\hat{\lambda}_{\text{intercept}}$ | $\hat{\lambda}_{\beta_{MktRF}}$ | $\hat{\lambda}_{\beta_{SMB}}$ | $\hat{\lambda}_{\beta_{HML}}$ | $\hat{\lambda}_{\beta_{RMW}}$ | $\hat{\lambda}_{\beta_{CMA}}$ | $\hat{\lambda}_{\beta_{INDvw}}$ | $\hat{\lambda}_{\text{IINDvw}}$ | $\hat{\lambda}_{\beta_{MKTvw}}$ | $\hat{\lambda}_{\beta_{FIRMvw}}$ | $\hat{\lambda}_{\text{IFIRMvw}}$ | $\hat{\lambda}_{\text{ln.BM}}$ | $\hat{\lambda}_{\text{ln.ME}}$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.856 | 0.24 | | | | | | | | | | | |
| | (1.995)** | (0.875) | | | | | | | | | | | |
| 2 | 1.381 | 0.285 | | | | | -1.668 | | | | | 0.243 | -0.081 |
| | (2.038)** | (1.029) | | | | | (-1.265) | | | | | (2.461)** | (-1.384) |
| 3 | 1.085 | 0.252 | | | | | | 0.001 | | | | 0.339 | |
| | (2.386)** | (0.969) | | | | | | (0.1) | | | | (3.113)*** | |
| 4 | 1.619 | 0.232 | | | | | | 0.001 | | | | | -0.123 |
| | (2.383)** | (0.868) | | | | | | (0.104) | | | | | (2.016)** |
| 5 | 1.506 | 0.244 | | | | | | 0 | | | | 0.259 | -0.081 |
| | (2.248)** | (0.942) | | | | | | (0) | | | | (2.726)*** | (-1.4) |
| 6 | 1.461 | 0.281 | | | | | -1.653 | 0.001 | | | | 0.26 | -0.081 |
| | (2.181)** | (1.032) | | | | | (-1.269) | (0.047) | | | | (2.689)*** | (-1.399) |
| 7 | 1.321 | 0.261 | | | | | -1.379 | | -7.566 | -4.461 | | 0.248 | -0.074 |
| | (1.991)** | (0.973) | | | | | (-1.113) | | (-1.508) | (-1.228) | | (2.502)** | (-1.315) |
| 8 | 1.42 | 0.256 | | | | | | 0.001 | -7.411 | -4.299 | | 0.262 | -0.076 |
| | (2.146)** | (0.973) | | | | | | (0.048) | (-1.486) | (-1.192) | | (2.739)*** | (-1.352) |
| 9 | 1.393 | 0.256 | | | | | -1.377 | 0.001 | -7.464 | -4.442 | | 0.262 | -0.074 |
| | (2.124)** | (0.972) | | | | | (-1.121) | (0.067) | (-1.499) | (-1.234) | | (2.703)*** | (-1.327) |
| 10 | 1.488 | 0.296 | | | | | -1.735 | | | | 0 | 0.24 | -0.095 |
| | (2.235)** | (1.071) | | | | | (-1.32) | | | | (-0.945) | (2.442)** | (1.679)* |
| 11 | 1.622 | 0.259 | | | | | | 0 | | | 0 | 0.256 | -0.097 |
| | (2.473)** | (1) | | | | | | (-0.037) | | | (-0.975) | (2.707)*** | (1.725)* |
| 12 | 1.573 | 0.293 | | | | | -1.719 | 0 | | | 0 | 0.256 | -0.096 |
| | (2.394)** | (1.08) | | | | | (-1.325) | (0.009) | | | (-0.956) | (2.671)*** | (1.704)* |
| 13 | 1.432 | 0.29 | | | | | -1.703 | | | -5.42 | 0 | 0.243 | -0.088 |
| | (2.17)** | (1.051) | | | | | (-1.282) | | | (-1.378) | (-0.912) | (2.458)** | (-1.588) |
| 14 | 1.533 | 0.301 | | | | | | 0 | | -5.387 | 0 | 0.257 | -0.093 |
| | (2.35)** | (1.104) | | | | | | (0.033) | | (-1.384) | (-0.993) | (2.653)*** | (1.669)* |
| 15 | 1.504 | 0.287 | | | | | -1.704 | 0.001 | | -5.411 | 0 | 0.257 | -0.089 |
| | (2.318)** | (1.058) | | | | | (-1.295) | (0.073) | | (-1.39) | (-0.923) | (2.665)*** | (-1.611) |
| 16 | 1.424 | 0.273 | | | | | -1.458 | | -7.741 | -4.691 | 0 | 0.244 | -0.088 |
| | (2.175)** | (1.019) | | | | | (-1.181) | | (-1.549) | (-1.297) | (-0.93) | (2.482)** | (-1.603) |
| 17 | 1.535 | 0.269 | | | | | | 0 | -7.581 | -4.519 | 0 | 0.258 | -0.091 |
| | (2.359)** | (1.025) | | | | | | (0.023) | (-1.531) | (-1.262) | (-1.015) | (2.713)*** | (1.667)* |
| 18 | 1.5 | 0.269 | | | | | -1.454 | 0 | -7.634 | -4.666 | 0 | 0.259 | -0.088 |
| | (2.321)** | (1.023) | | | | | (-1.191) | (0.035) | (-1.543) | (-1.304) | (-0.943) | (2.684)*** | (-1.624) |
| 19 | 0.838 | 0.289 | -0.002 | 0.142 | | | | | | | | | |
| | (2.031)** | (1.076) | (-0.028) | (1.246) | | | | | | | | | |
| 20 | 1.097 | 0.28 | -0.015 | 0.102 | | | | 0 | | | | 0.322 | |
| | (2.481)** | (1.083) | (-0.18) | (0.979) | | | | (0.038) | | | | (2.95)*** | |
| 21 | 1.736 | 0.313 | -0.064 | 0.174 | | | | 0.001 | | | | | -0.144 |
| | (2.597)*** | (1.188) | (-0.848) | (1.568) | | | | (0.064) | | | | | (2.299)** |
| 22 | 1.629 | 0.301 | -0.053 | 0.135 | | | | 0 | | | | 0.219 | -0.104 |
| | (2.473)** | (1.152) | (-0.74) | (1.319) | | | | (-0.026) | | | | (2.44)** | (1.794)* |
| 23 | 1.586 | 0.336 | -0.047 | 0.139 | | | -1.613 | 0 | | | | 0.23 | -0.104 |
| | (2.451)** | (1.242) | (-0.657) | (1.317) | | | (-1.226) | (0.029) | | | | (2.542)** | (1.81)* |
| 24 | 1.457 | 0.299 | -0.026 | 0.153 | | | -1.39 | | -7.737 | -4.445 | | 0.216 | -0.094 |
| | (2.251)** | (1.146) | (-0.338) | (1.408) | | | (-1.113) | | (-1.513) | (-1.197) | | (2.333)** | (1.697)* |
| 25 | 1.594 | 0.305 | -0.049 | 0.15 | | | | 0 | -7.557 | -4.146 | | 0.23 | -0.101 |
| | (2.476)** | (1.176) | (-0.674) | (1.467) | | | | (0.019) | (-1.512) | (-1.152) | | (2.547)** | (1.802)* |
| 26 | 1.546 | 0.29 | -0.028 | 0.163 | | | -1.376 | 0 | -7.591 | -4.399 | | 0.232 | -0.094 |
| | (2.413)** | (1.132) | (-0.367) | (1.525) | | | (-1.119) | (0.025) | (-1.509) | (-1.205) | | (2.557)** | (1.712)* |
| 27 | 1.599 | 0.357 | -0.045 | 0.129 | | | -1.704 | | | | 0 | 0.21 | -0.117 |
| | (2.494)** | (1.3) | (-0.621) | (1.209) | | | (-1.277) | | | | (-0.896) | (2.299)** | (2.098)** |
| 28 | 1.741 | 0.318 | -0.052 | 0.135 | | | | -0.001 | | | 0 | 0.216 | -0.12 |
| | (2.707)*** | (1.217) | (-0.731) | (1.326) | | | | (-0.051) | | | (-0.935) | (2.42)** | (2.125)** |
| 29 | 1.695 | 0.35 | -0.046 | 0.138 | | | -1.682 | 0 | | | 0 | 0.226 | -0.118 |
| | (2.674)*** | (1.295) | (-0.652) | (1.312) | | | (-1.282) | (0.002) | | | (-0.907) | (2.52)** | (2.124)** |
| 30 | 1.534 | 0.335 | -0.026 | 0.15 | | | -1.738 | | | -5.572 | 0 | 0.208 | -0.108 |
| | (2.41)** | (1.237) | (-0.338) | (1.332) | | | (-1.289) | | | (-1.382) | (-0.886) | (2.274)** | (1.977)** |
| 31 | 1.67 | 0.349 | -0.044 | 0.146 | | | | 0 | | -5.317 | 0 | 0.223 | -0.116 |
| | (2.651)*** | (1.297) | (-0.61) | (1.367) | | | | (0.02) | | (-1.354) | (-0.952) | (2.482)** | (2.095)** |
| 32 | 1.623 | 0.328 | -0.027 | 0.159 | | | -1.724 | 0 | | -5.525 | 0 | 0.224 | -0.109 |
| | (2.59)*** | (1.23) | (-0.359) | (1.43) | | | (-1.298) | (0.038) | | (-1.394) | (-0.897) | (2.497)** | (2)** |
| 33 | 1.558 | 0.313 | -0.024 | 0.151 | | | -1.462 | | -7.91 | -4.657 | 0 | 0.212 | -0.108 |
| | (2.445)** | (1.2) | (-0.317) | (1.398) | | | (-1.174) | | (-1.552) | (-1.258) | (-0.904) | (2.303)** | (2)** |
| 34 | 1.704 | 0.319 | -0.046 | 0.149 | | | | 0 | -7.731 | -4.355 | 0 | 0.225 | -0.116 |
| | (2.698)*** | (1.231) | (-0.639) | (1.454) | | | | (0.006) | (-1.556) | (-1.217) | (-0.986) | (2.513)** | (2.127)** |
| 35 | 1.651 | 0.304 | -0.026 | 0.161 | | | -1.446 | 0 | -7.758 | -4.605 | 0 | 0.228 | -0.109 |
| | (2.62)*** | (1.191) | (-0.344) | (1.507) | | | (-1.182) | (0.005) | (-1.55) | (-1.268) | (-0.917) | (2.529)** | (2.023)** |
| 36 | 0.814 | 0.281 | 0.007 | 0.157 | -0.077 | -0.03 | | | | | | | |
| | (1.971)** | (1.061) | (0.096) | (1.397) | (-0.597) | (-0.447) | | | | | | | |
| 37 | 1.075 | 0.279 | -0.009 | 0.114 | -0.081 | -0.043 | | 0 | | | | 0.316 | |
| | (2.426)** | (1.095) | (-0.124) | (1.122) | (-0.683) | (-0.678) | | (0.039) | | | | (3.033)*** | |
| 38 | 1.69 | 0.31 | -0.053 | 0.177 | -0.04 | -0.016 | | 0 | | | | | -0.138 |
| | (2.56)** | (1.193) | (-0.774) | (1.634) | (-0.334) | (-0.259) | | (0.03) | | | | | (2.319)** |
| 39 | 1.597 | 0.301 | -0.047 | 0.139 | -0.055 | -0.028 | | -0.001 | | | | 0.222 | -0.1 |
| | (2.447)** | (1.169) | (-0.698) | (1.386) | (-0.488) | (-0.454) | | (-0.052) | | | | (2.556)** | (1.81)* |
| 40 | 1.559 | 0.338 | -0.04 | 0.145 | -0.067 | -0.028 | -1.747 | 0 | | | | 0.231 | -0.1 |
| | (2.43)** | (1.255) | (-0.59) | (1.391) | (-0.571) | (-0.457) | (-1.273) | (-0.006) | | | | (2.632)*** | (1.832)* |
| 41 | 1.466 | 0.306 | -0.033 | 0.15 | -0.04 | -0.019 | -1.464 | | -7.734 | -4.562 | | 0.221 | -0.095 |
| | (2.256)** | (1.172) | (-0.46) | (1.441) | (-0.357) | (-0.328) | (-1.149) | | (-1.504) | (-1.213) | | (2.434)** | (1.754)* |
| 42 | 1.587 | 0.305 | -0.05 | 0.153 | -0.038 | -0.012 | | 0 | -7.518 | -4.252 | | 0.232 | -0.1 |
| | (2.457)** | (1.182) | (-0.744) | (1.545) | (-0.339) | (-0.217) | | (-0.03) | (-1.502) | (-1.168) | | (2.636)*** | (1.829)* |
| 43 | 1.56 | 0.298 | -0.033 | 0.159 | -0.034 | -0.016 | -1.45 | 0 | -7.586 | -4.511 | | 0.237 | -0.095 |
| | (2.419)** | (1.162) | (-0.47) | (1.548) | (-0.311) | (-0.278) | (-1.155) | (-0.03) | (-1.5) | (-1.22) | | (2.664)*** | (1.774)* |
| 44 | 1.569 | 0.354 | -0.043 | 0.136 | -0.079 | -0.032 | -1.834 | | | | 0 | 0.212 | -0.113 |
| | (2.464)** | (1.295) | (-0.621) | (1.298) | (-0.659) | (-0.505) | (-1.32) | | | | (-0.801) | (2.39)** | (2.104)** |
| 45 | 1.709 | 0.314 | -0.049 | 0.14 | -0.062 | -0.029 | | -0.001 | | | 0 | 0.219 | -0.115 |
| | (2.68)*** | (1.218) | (-0.733) | (1.397) | (-0.549) | (-0.469) | | (-0.076) | | | (-0.865) | (2.548)** | (2.14)** |
| 46 | 1.665 | 0.347 | -0.042 | 0.144 | -0.073 | -0.029 | -1.816 | 0 | | | 0 | 0.229 | -0.114 |
| | (2.645)*** | (1.293) | (-0.625) | (1.394) | (-0.625) | (-0.475) | (-1.328) | (-0.031) | | | (-0.81) | (2.619)*** | (2.137)** |
| 47 | 1.529 | 0.341 | -0.03 | 0.147 | -0.067 | -0.04 | -1.848 | | | -5.786 | 0 | 0.215 | -0.107 |
| | (2.401)** | (1.256) | (-0.419) | (1.349) | (-0.568) | (-0.622) | (-1.332) | | | (-1.405) | (-0.777) | (2.388)** | (2.011)** |
| 48 | 1.657 | 0.349 | -0.044 | 0.151 | -0.069 | -0.029 | | 0 | | -5.472 | 0 | 0.226 | -0.114 |
| | (2.637)*** | (1.3) | (-0.641) | (1.427) | (-0.596) | (-0.488) | | (-0.027) | | (-1.364) | (-0.856) | (2.587)** | (2.134)** |
| 49 | 1.621 | 0.334 | -0.029 | 0.155 | -0.061 | -0.037 | -1.834 | 0 | | -5.735 | 0 | 0.23 | -0.108 |
| | (2.58)** | (1.252) | (-0.419) | (1.439) | (-0.534) | (-0.59) | (-1.342) | (-0.016) | | (-1.416) | (-0.786) | (2.62)*** | (2.037)** |
| 50 | 1.564 | 0.315 | -0.034 | 0.149 | -0.047 | -0.021 | -1.53 | | -7.862 | -4.755 | 0 | 0.217 | -0.108 |
| | (2.445)** | (1.21) | (-0.473) | (1.437) | (-0.416) | (-0.349) | (-1.205) | | (-1.535) | (-1.27) | (-0.806) | (2.41)** | (2.044)** |
| 51 | 1.697 | 0.315 | -0.051 | 0.151 | -0.044 | -0.013 | | -0.001 | -7.656 | -4.443 | 0 | 0.228 | -0.114 |
| | (2.678)*** | (1.225) | (-0.753) | (1.536) | (-0.399) | (-0.239) | | (-0.045) | (-1.539) | (-1.228) | (-0.892) | (2.609)*** | (2.151)** |
| 52 | 1.661 | 0.308 | -0.034 | 0.157 | -0.041 | -0.017 | -1.514 | -0.001 | -7.707 | -4.698 | 0 | 0.233 | -0.109 |
| | (2.621)*** | (1.204) | (-0.483) | (1.538) | (-0.374) | (-0.299) | (-1.213) | (-0.051) | (-1.533) | (-1.279) | (-0.814) | (2.642)*** | (2.072)** |

| # | $\hat{\lambda}_{\text{intercept}}$ | $\hat{\lambda}_{\beta_{MktRF}}$ | $\hat{\lambda}_{\beta_{SMB}}$ | $\hat{\lambda}_{\beta_{HML}}$ | $\hat{\lambda}_{\beta_{RMW}}$ | $\hat{\lambda}_{\beta_{CMA}}$ | $\hat{\lambda}_{\beta_{INDew}}$ | $\hat{\lambda}_{\text{IINDew}}$ | $\hat{\lambda}_{\beta_{MKTew}}$ | $\hat{\lambda}_{\beta_{FIRMew}}$ | $\hat{\lambda}_{\text{IFIRMew}}$ | $\hat{\lambda}_{\text{ln.BM}}$ | $\hat{\lambda}_{\text{ln.M}}$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.856 | 0.24 | | | | | | | | | | | |
| | (1.995)** | (0.875) | | | | | | | | | | | |
| 2 | 0.924 | 0.335 | | | | | -0.814 | | | | | 0.315 | |
| | (2.003)** | (1.147) | | | | | (-1.602) | | | | | (2.841)*** | |
| 3 | 1.457 | 0.31 | | | | | -0.768 | | | | | | -0.121 |
| | (2.121)** | (1.036) | | | | | (-1.497) | | | | | | (1.976 |
| 4 | 1.344 | 0.324 | | | | | -0.776 | | | | | 0.237 | -0.082 |
| | (1.992)** | (1.112) | | | | | (-1.517) | | | | | (2.405)** | (-1.40 |
| 5 | 1.46 | 0.251 | | | | | | -0.005 | | | | 0.239 | -0.08 |
| | (2.199)** | (0.954) | | | | | | (-0.278) | | | | (2.498)** | (-1.35 |
| 6 | 1.396 | 0.327 | | | | | -0.788 | -0.005 | | | | 0.236 | -0.081 |
| | (2.103)** | (1.13) | | | | | (-1.534) | (-0.29) | | | | (2.44)** | (-1.38 |
| 7 | 1.304 | 0.318 | | | | | -0.638 | | -6.222 | -21.692 | | 0.234 | -0.079 |
| | (1.976)** | (1.119) | | | | | (-1.342) | | (-1.482) | (-1.408) | | (2.36)** | (-1.41 |
| 8 | 1.409 | 0.302 | | | | | | -0.005 | -6.298 | -22.585 | | 0.242 | -0.081 |
| | (2.154)** | (1.082) | | | | | | (-0.286) | (-1.481) | (-1.44) | | (2.506)** | (-1.41 |
| 9 | 1.35 | 0.321 | | | | | -0.649 | -0.005 | -6.283 | -21.914 | | 0.233 | -0.079 |
| | (2.078)** | (1.136) | | | | | (-1.353) | (-0.296) | (-1.49) | (-1.411) | | (2.402)** | (-1.38 |
| 10 | 1.448 | 0.336 | | | | | -0.801 | | | | 0 | 0.233 | -0.096 |
| | (2.183)** | (1.158) | | | | | (-1.566) | | | | (-0.946) | (2.381)** | (1.696 |
| 11 | 1.567 | 0.264 | | | | | | -0.005 | | | 0 | 0.233 | -0.095 |
| | (2.403)** | (1.008) | | | | | | (-0.285) | | | (-0.909) | (2.451)** | (1.66) |
| 12 | 1.503 | 0.339 | | | | | -0.813 | -0.005 | | | 0 | 0.231 | -0.095 |
| | (2.303)** | (1.177) | | | | | (-1.581) | (-0.302) | | | (-0.927) | (2.397)** | (1.674 |
| 13 | 1.417 | 0.346 | | | | | -0.766 | | | -26.364 | 0 | 0.226 | -0.095 |
| | (2.131)** | (1.188) | | | | | (-1.488) | | | (-1.558) | (-0.911) | (2.278)** | (1.686 |
| 14 | 1.519 | 0.325 | | | | | | -0.006 | | -24.828 | 0 | 0.232 | -0.096 |
| | (2.323)** | (1.133) | | | | | | (-0.323) | | (-1.545) | (-0.925) | (2.389)** | (1.688 |
| 15 | 1.474 | 0.349 | | | | | -0.773 | -0.006 | | -26.474 | 0 | 0.224 | -0.095 |
| | (2.252)** | (1.206) | | | | | (-1.495) | (-0.343) | | (-1.557) | (-0.889) | (2.301)** | (1.672 |
| 16 | 1.399 | 0.33 | | | | | -0.665 | | -6.377 | -22.621 | 0 | 0.23 | -0.092 |
| | (2.157)** | (1.163) | | | | | (-1.399) | | (-1.526) | (-1.466) | (-0.885) | (2.334)** | (1.698 |
| 17 | 1.509 | 0.316 | | | | | | -0.005 | -6.479 | -23.519 | 0 | 0.237 | -0.094 |
| | (2.347)** | (1.132) | | | | | | (-0.302) | (-1.527) | (-1.492) | (-0.887) | (2.466)** | (1.714 |
| 18 | 1.448 | 0.333 | | | | | -0.674 | -0.005 | -6.439 | -22.807 | 0 | 0.228 | -0.092 |
| | (2.268)** | (1.181) | | | | | (-1.408) | (-0.307) | (-1.534) | (-1.466) | (-0.863) | (2.358)** | (1.679 |
| 19 | 0.838 | 0.289 | -0.002 | 0.142 | | | | | | | | | |
| | (2.031)** | (1.076) | (-0.028) | (1.246) | | | | | | | | | |
| 20 | 1.026 | 0.286 | -0.011 | 0.083 | | | | -0.002 | | | | 0.299 | |
| | (2.387)** | (1.086) | (-0.137) | (0.799) | | | | (-0.099) | | | | (2.765)*** | |
| 21 | 1.678 | 0.321 | -0.059 | 0.152 | | | | -0.007 | | | | | -0.139 |
| | (2.535)** | (1.197) | (-0.782) | (1.393) | | | | (-0.392) | | | | | (2.221 |
| 22 | 1.56 | 0.307 | -0.049 | 0.116 | | | | -0.005 | | | | 0.2 | -0.101 |
| | (2.397)** | (1.156) | (-0.672) | (1.143) | | | | (-0.3) | | | | (2.221)** | (1.729 |
| 23 | 1.498 | 0.371 | -0.032 | 0.129 | | | -0.757 | -0.005 | | | | 0.21 | -0.1 |
| | (2.331)** | (1.289) | (-0.426) | (1.195) | | | (-1.458) | (-0.306) | | | | (2.336)** | (1.744 |
| 24 | 1.429 | 0.362 | -0.03 | 0.145 | | | -0.59 | | -6.132 | -19.291 | | 0.209 | -0.099 |
| | (2.203)** | (1.275) | (-0.391) | (1.361) | | | (-1.239) | | (-1.468) | (-1.254) | | (2.285)** | (1.762 |
| 25 | 1.515 | 0.34 | -0.025 | 0.137 | | | | -0.005 | -6.246 | -20.868 | | 0.213 | -0.101 |
| | (2.365)** | (1.21) | (-0.323) | (1.343) | | | | (-0.268) | (-1.452) | (-1.295) | | (2.341)** | (1.756 |
| 26 | 1.467 | 0.358 | -0.027 | 0.139 | | | -0.601 | -0.006 | -6.169 | -19.613 | | 0.21 | -0.097 |
| | (2.292)** | (1.266) | (-0.36) | (1.34) | | | (-1.254) | (-0.332) | (-1.471) | (-1.266) | | (2.318)** | (1.715 |
| 27 | 1.556 | 0.389 | -0.035 | 0.137 | | | -0.772 | | | | 0 | 0.206 | -0.117 |
| | (2.434)** | (1.348) | (-0.457) | (1.244) | | | (-1.488) | | | | (-0.896) | (2.279)** | (2.091 |
| 28 | 1.663 | 0.323 | -0.048 | 0.116 | | | | -0.005 | | | 0 | 0.195 | -0.116 |
| | (2.607)*** | (1.215) | (-0.662) | (1.153) | | | | (-0.295) | | | (-0.867) | (2.176)** | (2.039 |
| 29 | 1.599 | 0.385 | -0.031 | 0.128 | | | -0.783 | -0.005 | | | 0 | 0.205 | -0.114 |
| | (2.534)** | (1.34) | (-0.42) | (1.192) | | | (-1.503) | (-0.306) | | | (-0.873) | (2.3)** | (2.043 |
| 30 | 1.518 | 0.405 | -0.029 | 0.137 | | | -0.739 | | | -24.807 | 0 | 0.206 | -0.115 |
| | (2.369)** | (1.379) | (-0.378) | (1.271) | | | (-1.411) | | | (-1.442) | (-0.855) | (2.283)** | (2.052 |
| 31 | 1.626 | 0.376 | -0.039 | 0.129 | | | | -0.005 | | -23.632 | 0 | 0.206 | -0.117 |
| | (2.56)** | (1.291) | (-0.533) | (1.226) | | | | (-0.295) | | (-1.405) | (-0.866) | (2.316)** | (2.058 |
| 32 | 1.559 | 0.401 | -0.026 | 0.13 | | | -0.747 | -0.006 | | -25.024 | 0 | 0.205 | -0.113 |
| | (2.466)** | (1.371) | (-0.344) | (1.233) | | | (-1.421) | (-0.322) | | (-1.449) | (-0.83) | (2.296)** | (2.013 |
| 33 | 1.519 | 0.374 | -0.027 | 0.144 | | | -0.618 | | -6.294 | -20.259 | 0 | 0.206 | -0.112 |
| | (2.381)** | (1.321) | (-0.363) | (1.36) | | | (-1.296) | | (-1.511) | (-1.312) | (-0.842) | (2.264)** | (2.047 |
| 34 | 1.609 | 0.354 | -0.023 | 0.136 | | | | -0.005 | -6.423 | -21.775 | 0 | 0.208 | -0.114 |
| | (2.555)** | (1.26) | (-0.305) | (1.341) | | | | (-0.271) | (-1.495) | (-1.345) | (-0.844) | (2.308)** | (2.047 |
| 35 | 1.558 | 0.371 | -0.025 | 0.137 | | | -0.628 | -0.006 | -6.33 | -20.546 | 0 | 0.205 | -0.11 |
| | (2.477)** | (1.313) | (-0.329) | (1.333) | | | (-1.309) | (-0.33) | (-1.514) | (-1.322) | (-0.819) | (2.281)** | (2.001 |
| 36 | 1.515 | 0.311 | -0.051 | 0.123 | | | | | | | | 0.2 | -0.103 |
| | (2.292)** | (1.167) | (-0.695) | (1.188) | | | | | | | | (2.184)** | (1.777 |
| 37 | 1.017 | 0.283 | -0.008 | 0.096 | -0.092 | -0.056 | | -0.004 | | | | 0.296 | |
| | (2.362)** | (1.095) | (-0.107) | (0.952) | (-0.757) | (-0.879) | | (-0.215) | | | | (2.867)*** | |
| 38 | 1.639 | 0.317 | -0.05 | 0.158 | -0.051 | -0.029 | | -0.009 | | | | | -0.133 |
| | (2.506)** | (1.198) | (-0.728) | (1.47) | (-0.422) | (-0.468) | | (-0.488) | | | | | (2.236 |
| 39 | 1.535 | 0.306 | -0.045 | 0.121 | -0.066 | -0.041 | | -0.007 | | | | 0.204 | -0.097 |
| | (2.38)** | (1.17) | (-0.656) | (1.221) | (-0.573) | (-0.666) | | (-0.385) | | | | (2.352)** | (1.738 |
| 40 | 1.49 | 0.365 | -0.033 | 0.133 | -0.079 | -0.048 | -0.76 | -0.007 | | | | 0.214 | -0.097 |
| | (2.333)** | (1.294) | (-0.463) | (1.256) | (-0.655) | (-0.761) | (-1.444) | (-0.401) | | | | (2.437)** | (1.759 |
| 41 | 1.416 | 0.362 | -0.037 | 0.154 | -0.057 | -0.025 | -0.607 | | -6.557 | -20.004 | | 0.214 | -0.097 |
| | (2.189)** | (1.278) | (-0.522) | (1.489) | (-0.479) | (-0.404) | (-1.212) | | (-1.489) | (-1.214) | | (2.382)** | (1.753 |
| 42 | 1.506 | 0.34 | -0.027 | 0.144 | -0.063 | -0.033 | | -0.007 | -6.466 | -21.041 | | 0.216 | -0.098 |
| | (2.35)** | (1.224) | (-0.381) | (1.442) | (-0.549) | (-0.561) | | (-0.405) | (-1.467) | (-1.263) | | (2.443)** | (1.762 |
| 43 | 1.462 | 0.358 | -0.035 | 0.148 | -0.06 | -0.033 | -0.619 | -0.008 | -6.592 | -20.343 | | 0.214 | -0.095 |
| | (2.29)** | (1.272) | (-0.496) | (1.466) | (-0.515) | (-0.55) | (-1.227) | (-0.45) | (-1.492) | (-1.227) | | (2.425)** | (1.714 |
| 44 | 1.538 | 0.378 | -0.037 | 0.141 | -0.081 | -0.04 | -0.773 | | | | 0 | 0.21 | -0.113 |
| | (2.422)** | (1.337) | (-0.522) | (1.308) | (-0.67) | (-0.616) | (-1.473) | | | | (-0.808) | (2.377)** | (2.092 |
| 45 | 1.638 | 0.318 | -0.047 | 0.122 | -0.072 | -0.041 | | -0.007 | | | 0 | 0.2 | -0.111 |
| | (2.59)*** | (1.215) | (-0.687) | (1.234) | (-0.631) | (-0.679) | | (-0.384) | | | (-0.802) | (2.319)** | (2.045 |
| 46 | 1.589 | 0.375 | -0.035 | 0.132 | -0.085 | -0.048 | -0.784 | -0.007 | | | 0 | 0.21 | -0.11 |
| | (2.533)** | (1.331) | (-0.492) | (1.259) | (-0.709) | (-0.778) | (-1.487) | (-0.406) | | | (-0.787) | (2.408)** | (2.049 |
| 47 | 1.509 | 0.388 | -0.033 | 0.143 | -0.082 | -0.042 | -0.727 | | | -24.461 | 0 | 0.209 | -0.111 |
| | (2.371)** | (1.35) | (-0.472) | (1.363) | (-0.682) | (-0.662) | (-1.38) | | | (-1.404) | (-0.778) | (2.377)** | (2.052 |
| 48 | 1.607 | 0.363 | -0.04 | 0.137 | -0.079 | -0.042 | | -0.007 | | -23.877 | 0 | 0.21 | -0.112 |
| | (2.542)** | (1.276) | (-0.588) | (1.32) | (-0.673) | (-0.682) | | (-0.39) | | (-1.38) | (-0.79) | (2.422)** | (2.052 |
| 49 | 1.557 | 0.384 | -0.031 | 0.136 | -0.085 | -0.05 | -0.735 | -0.007 | | -24.667 | 0 | 0.209 | -0.109 |
| | (2.477)** | (1.344) | (-0.442) | (1.325) | (-0.718) | (-0.815) | (-1.39) | (-0.422) | | (-1.411) | (-0.756) | (2.401)** | (2.015 |
| 50 | 1.507 | 0.37 | -0.036 | 0.154 | -0.062 | -0.026 | -0.633 | | -6.701 | -20.834 | 0 | 0.211 | -0.109 |
| | (2.369)** | (1.313) | (-0.513) | (1.494) | (-0.526) | (-0.419) | (-1.263) | | (-1.527) | (-1.263) | (-0.776) | (2.365)** | (2.03) |
| 51 | 1.6 | 0.351 | -0.028 | 0.143 | -0.069 | -0.034 | | -0.007 | -6.62 | -21.843 | 0 | 0.213 | -0.111 |
| | (2.541)** | (1.265) | (-0.393) | (1.443) | (-0.603) | (-0.581) | | (-0.413) | (-1.505) | (-1.307) | (-0.772) | (2.417)** | (2.047 |
| 52 | 1.553 | 0.367 | -0.034 | 0.147 | -0.065 | -0.033 | -0.644 | -0.008 | -6.734 | -21.139 | 0 | 0.211 | -0.107 |
| | (2.475)** | (1.308) | (-0.484) | (1.465) | (-0.565) | (-0.565) | (-1.276) | (-0.452) | (-1.529) | (-1.274) | (-0.753) | (2.392)** | (1.992 |