

Question 1 (2 points) ✓ *Saved*

What is the difference in mean Monday return between the large portfolio versus the small portfolio? Find the t-statistic to test if the difference is significantly different from the null hypothesis of zero. Assume returns are normally distributed with the same variances. The means are unconditional expectations. Find the answer with the difference, the t-statistic, and the p-value.

- ☒ A) 0.006, 2.43, 0.015
- ☐ B) 0.009, 3.12, 0.001
- ☐ C) 0.012, 3.34, 0.005
- ☐ D) 0.015, 3.67, 0.000

Question 2 (2 points) ✓ *Saved*

Run OLS with dependent variable LSR and explanatory variables STIR and the 5 dummy variables. Similarly run OLS with dependent variable SSR and explanatory variables STIR and the 5 dummy variables. Which of the following statement is the most accurate? (Significance level is 1%)

- ☐ A) Small stock portfolio returns display significant positive Monday effect while Large stock portfolio returns display significant negative Monday effect.
- ☐ B) Small stock portfolio returns display significant positive Monday effect while Large stock portfolio returns do not display Monday effect.
- ☒ C) Small stock portfolio returns display significant negative Monday effect while Large stock portfolio returns do not display Monday effect.
- ☐ D) Small stock portfolio returns do not display Monday effect while Large stock portfolio returns display significant negative Monday effect.

Question 3 (2 points) ✓ *Saved*

Find the variances of the fitted residuals for the two regressions in Q2. Assume these variances are different. Run a GLS regression with both LSR and SSR combined as dependent variable. The explanatory variables are the same STIR and the 5 dummy variables. What is the coefficient estimate and its t-value for the Monday dummy?

- ☐ A) -0.006, -4.22
- ☒ B) -0.000, -0.22
- ☐ C) 0.000, 0.35
- ☐ D) 0.003, 1.67

Question 4 (2 points) ✓ *Saved*

Suppose we find the fitted residuals in the GLS regression in Q3. What are the Breusch–Pagan chi-square test statistic value and the White's Heteroskedasticity chi-square test statistic value?

- ☐ A) 6.64, 11.92
- ☒ B) 7.57, 12.38
- ☐ C) 9.21, 16.4
- ☐ D) 8.81, 75.5

Question 5 (2 points) ✓ *Saved*

In the OLS regression of dependent variable LSR on explanatory variables STIR and the 5 dummy variables, suppose the fitted residuals indicate significantly positive autocorrelations. Perform a GLS regression to improve on the estimates. Report the OLS Durbin–Watson statistic and the GLS Durbin–Watson statistic.

☐ A) 1.9, 2.3

☐ B) 1.9, 2.1

☒ C) 1.9, 2.0

☐ D) 1.9, 1.9