**Monthly returns**

**> summary(lm.monthly.1969)**

Call:

lm(formula = X1969$`Monthly gold returns` ~ X1969$`Monthly SP500 returns`)

Residuals:

Min 1Q Median 3Q Max

-0.0241051 -0.0086866 -0.0004109 0.0067690 0.0286153

Coefficients:

Estimate Std. Error t value Pr(>|t|)

(Intercept) 0.006368 0.004953 1.286 0.231

**X1969$`Monthly SP500 returns` -0.007148 0.011330 -0.631 0.544**

Residual standard error: 0.01568 on 9 degrees of freedom

(231 observations deleted due to missingness)

**Multiple R-squared: 0.04236**, Adjusted R-squared: -0.06405

F-statistic: 0.3981 on 1 and 9 DF, **p-value: 0.5438**

**> summary(lm.monthly.1973)**

Call:

lm(formula = X1973$`Monthly gold returns` ~ X1973$`Monthly SP500 returns`)

Residuals:

Min 1Q Median 3Q Max

-0.10596 -0.06171 -0.01586 0.06761 0.20101

Coefficients:

Estimate Std. Error t value Pr(>|t|)

(Intercept) 0.04194 0.02269 1.849 0.0858 .

**X1973$`Monthly SP500 returns` 0.23932 0.30488 0.785 0.4456**

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Signif. codes: 0 ‘\*\*\*’ 0.001 ‘\*\*’ 0.01 ‘\*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Residual standard error: 0.08944 on 14 degrees of freedom

(333 observations deleted due to missingness)

**Multiple R-squared: 0.04216,** Adjusted R-squared: -0.02626

F-statistic: 0.6162 on 1 and 14 DF, **p-value: 0.4456**

**> summary(lm.monthly.1980)**

Call:

lm(formula = X1980$`Monthly gold returns` ~ X1980$`Monthly SP500 returns`)

Residuals:

1 2 3 4 5 6

-0.000539 -0.019345 -0.001489 -0.062997 -0.019552 0.103923

Coefficients:

Estimate Std. Error t value Pr(>|t|)

(Intercept) -0.01058 0.02654 -0.399 0.71049

**X1980$`Monthly SP500 returns` 2.24407 0.45258 4.958 0.00772 \*\***

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Signif. codes: 0 ‘\*\*\*’ 0.001 ‘\*\*’ 0.01 ‘\*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Residual standard error: 0.06231 on 4 degrees of freedom

(126 observations deleted due to missingness)

**Multiple R-squared: 0.8601**, Adjusted R-squared: 0.8251

F-statistic: 24.59 on 1 and 4 DF**, p-value: 0.007715**

**> summary(lm.monthly.1981)**

Call:

lm(formula = X1981$`Monthly gold returns` ~ X1981$`Monthly SP500 returns`)

Residuals:

Min 1Q Median 3Q Max

-0.11379 -0.05229 -0.01799 0.05544 0.11006

Coefficients:

Estimate Std. Error t value Pr(>|t|)

(Intercept) 0.007536 0.017829 0.423 0.679

**X1981$`Monthly SP500 returns` 0.665983 0.390247 1.707 0.110**

Residual standard error: 0.0713 on 14 degrees of freedom

(334 observations deleted due to missingness)

Multiple R-squared: 0.1722, Adjusted R-squared: 0.1131

F-statistic: 2.912 on 1 and 14 DF, **p-value: 0.11**

**> summary(lm.monthly.1990)**

Call:

lm(formula = X1990$`Monthly gold returns` ~ X1990$`Monthly SP500 returns`)

Residuals:

Min 1Q Median 3Q Max

-0.06362 -0.01027 0.01590 0.02332 0.02983

Coefficients:

Estimate Std. Error t value Pr(>|t|)

(Intercept) 0.008377 0.013997 0.598 0.571

**X1990$`Monthly SP500 returns` -0.369821 0.263591 -1.403 0.210**

Residual standard error: 0.03959 on 6 degrees of freedom

(167 observations deleted due to missingness)

**Multiple R-squared: 0.247,** Adjusted R-squared: 0.1215

F-statistic: 1.968 on 1 and 6 DF, **p-value: 0.2102**

**> summary(lm.monthly.2001)**

Call:

lm(formula = X2001$`Monthly gold returns` ~ X2001$`Monthly SP500 returns`)

Residuals:

Min 1Q Median 3Q Max

-0.046612 -0.024919 0.006155 0.015147 0.056256

Coefficients:

Estimate Std. Error t value Pr(>|t|)

(Intercept) 0.006696 0.014569 0.460 0.662

X2001$`Monthly SP500 returns` **-0.114155** 0.258627 -0.441 0.674

Residual standard error: 0.03848 on 6 degrees of freedom

(168 observations deleted due to missingness)

**Multiple R-squared: 0.03145**, Adjusted R-squared: -0.13

F-statistic: 0.1948 on 1 and 6 DF, **p-value: 0.6744**

**> summary(lm.monthly.2007)**

Call:

lm(formula = X2007$`Monthly gold returns` ~ X2007$`Monthly SP500 returns`)

Residuals:

Min 1Q Median 3Q Max

-0.17887 -0.05473 0.02630 0.05665 0.09899

Coefficients:

Estimate Std. Error t value Pr(>|t|)

(Intercept) 0.02395 0.01951 1.228 0.237

**X2007$`Monthly SP500 returns` 0.08865 0.24652 0.360 0.724**

Residual standard error: 0.08033 on 16 degrees of freedom

(373 observations deleted due to missingness)

**Multiple R-squared: 0.008017,** Adjusted R-squared: -0.05398

F-statistic: 0.1293 on 1 and 16 DF, **p-value: 0.7239**

**> summary(lm.monthly.2020)**

Call:

lm(formula = X2020$`Monthly gold returns` ~ X2020$`Monthly SP500 returns`)

Residuals:

ALL 2 residuals are 0: no residual degrees of freedom!

Coefficients:

Estimate Std. Error t value Pr(>|t|)

(Intercept) 0.04278 NaN NaN NaN

X2020$`Monthly SP500 returns` 0.22594 NaN NaN NaN

Residual standard error: NaN on 0 degrees of freedom

(42 observations deleted due to missingness)

Multiple R-squared: 1, Adjusted R-squared: NaN

F-statistic: NaN on 1 and 0 DF, p-value: NA