

# Table 1: Summary of Data

Year	Q1	Q2	Q3	Q4
2018	100	120	150	180
2019	110	130	160	190
2020	120	140	170	200
2021	130	150	180	210
2022	140	160	190	220

Source: Author's calculations based on data from the Bureau of Economic Analysis.

Note: All values are in billions of dollars.

Q1: First Quarter, Q2: Second Quarter, Q3: Third Quarter, Q4: Fourth Quarter.

# Table 2: Regression Results

Model 1:  $Y = \beta_0 + \beta_1 X + \epsilon$

Model 2:  $Y = \beta_0 + \beta_1 X + \beta_2 Z + \epsilon$

Model 3:  $Y = \beta_0 + \beta_1 X + \beta_2 Z + \beta_3 W + \epsilon$

Table 2 displays the regression results for the three models. The dependent variable is  $Y$ , and the independent variables are  $X$ ,  $Z$ , and  $W$ . The coefficients are estimated using ordinary least squares (OLS).

The following table shows the estimated coefficients and their standard errors for each model.

Model	Variable	Coefficient	Standard Error
Model 1	$\beta_0$	100	10
	$\beta_1$	1.2	0.1
Model 2	$\beta_0$	110	12
	$\beta_1$	1.1	0.1
	$\beta_2$	0.5	0.1
Model 3	$\beta_0$	120	15
	$\beta_1$	1.0	0.1
	$\beta_2$	0.4	0.1
	$\beta_3$	0.3	0.1

The regression results indicate that the independent variables  $X$ ,  $Z$ , and  $W$  have a positive and significant impact on the dependent variable  $Y$ . The coefficient estimates are statistically significant at the 5% level.

The adjusted R-squared values for the three models are 0.85, 0.90, and 0.92, respectively, indicating a strong fit of the models to the data.

# Table 3: Descriptive Statistics

Table 3 provides descriptive statistics for the variables  $X$ ,  $Z$ , and  $W$ .

The following table shows the mean, standard deviation, and range for each variable.

Variable	Mean	Standard Deviation	Range
$X$	150	20	100 - 200
$Z$	120	15	80 - 160
$W$	100	10	60 - 140

The descriptive statistics show that the variables are normally distributed and have a positive skewness.

The correlation matrix for the variables is as follows:

	$X$	$Z$	$W$
$X$	1.00	0.70	0.50
$Z$	0.70	1.00	0.60
$W$	0.50	0.60	1.00

The correlation matrix indicates that there is a strong positive correlation between  $X$  and  $Z$ , and a moderate positive correlation between  $X$  and  $W$ .

The following table shows the results of the hypothesis tests for the regression coefficients.

Model	Variable	t-statistic	p-value
Model 1	$\beta_1$	12.0	< 0.001
	$\beta_2$	5.0	< 0.001
Model 2	$\beta_1$	11.0	< 0.001
	$\beta_2$	5.0	< 0.001
	$\beta_3$	3.0	< 0.01
Model 3	$\beta_1$	10.0	< 0.001
	$\beta_2$	4.0	< 0.001
	$\beta_3$	3.0	< 0.01
	$\beta_4$	2.0	< 0.05

The hypothesis tests show that all the regression coefficients are statistically significant at the 5% level.

The following table shows the results of the F-tests for the overall fit of the models.

Model	F-statistic	p-value
Model 1	144.0	< 0.001
Model 2	121.0	< 0.001
Model 3	100.0	< 0.001

The F-tests indicate that the models provide a good fit to the data.