R2 0.370

Std. Error 286.793

n 15

ANOVA table

*Source SS df MS F p-value*

Regression 628,298.2 1 628,298.2 7.64 .0161

Residual 1,069,251.8 13 82,250.1

Total 1,697,550.0 14

Regression output *confidence interval*

*Variables coefficients std. error t (df* = *13) p-value 95% lower 95% upper*

Intercept 1,743.57 288.82 6.037 .0000 1,119.61 2,367.53

Slope −1.2163 0.4401 −2.764 .0161 −2.1671 −0.2656

APPENDIX D

Student’s t Critical Values

This table shows the t-value that defines the area for the stated degrees of freedom (.). t 0

782

Confidence Level

.80 .90 .95 .98 .99

Significance Level for Two-Tailed Test

.20 .10 .05 .02 .01

Significance Level for One-Tailed Test

. .10 .05 .025 .01 .005

36 1.306 1.688 2.028 2.434 2.719

37 1.305 1.687 2.026 2.431 2.715

38 1.304 1.686 2.024 2.429 2.712

39 1.304 1.685 2.023 2.426 2.708

40 1.303 1.684 2.021 2.423 2.704

41 1.303 1.683 2.020 2.421 2.701

42 1.302 1.682 2.018 2.418 2.698

43 1.302 1.681 2.017 2.416 2.695

44 1.301 1.680 2.015 2.414 2.692

45 1.301 1.679 2.014 2.412 2.690

46 1.300 1.679 2.013 2.410 2.687

47 1.300 1.678 2.012 2.408 2.685

48 1.299 1.677 2.011 2.407 2.682

49 1.299 1.677 2.010 2.405 2.680

50 1.299 1.676 2.009 2.403 2.678

55 1.297 1.673 2.004 2.396 2.668

60 1.296 1.671 2.000 2.390 2.660

65 1.295 1.669 1.997 2.385 2.654

70 1.294 1.667 1.994 2.381 2.648

75 1.293 1.665 1.992 2.377 2.643

80 1.292 1.664 1.990 2.374 2.639

85 1.292 1.663 1.988 2.371 2.635

90 1.291 1.662 1.987 2.368 2.632

95 1.291 1.661 1.985 2.366 2.629

100 1.290 1.660 1.984 2.364 2.626

110 1.289 1.659 1.982 2.361 2.621

120 1.289 1.658 1.980 2.358 2.617

130 1.288 1.657 1.978 2.355 2.614

140 1.288 1.656 1.977 2.353 2.611

150 1.287 1.655 1.976 2.351 2.609

8 1.282 1.645 1.960 2.326 2.576

Confidence Level

.80 .90 .95 .98 .99

Significance Level for Two-Tailed Test

.20 .10 .05 .02 .01

Significance Level for One-Tailed Test

. .10 .05 .025 .01 .005

1 3.078 6.314 12.706 31.821 63.656

2 1.886 2.920 4.303 6.965 9.925

3 1.638 2.353 3.182 4.541 5.841

4 1.533 2.132 2.776 3.747 4.604

5 1.476 2.015 2.571 3.365 4.032

6 1.440 1.943 2.447 3.143 3.707

7 1.415 1.895 2.365 2.998 3.499

8 1.397 1.860 2.306 2.896 3.355

9 1.383 1.833 2.262 2.821 3.250

10 1.372 1.812 2.228 2.764 3.169

11 1.363 1.796 2.201 2.718 3.106

12 1.356 1.782 2.179 2.681 3.055

13 1.350 1.771 2.160 2.650 3.012

14 1.345 1.761 2.145 2.624 2.977

15 1.341 1.753 2.131 2.602 2.947

16 1.337 1.746 2.120 2.583 2.921

17 1.333 1.740 2.110 2.567 2.898

18 1.330 1.734 2.101 2.552 2.878

19 1.328 1.729 2.093 2.539 2.861

20 1.325 1.725 2.086 2.528 2.845

21 1.323 1.721 2.080 2.518 2.831

22 1.321 1.717 2.074 2.508 2.819

23 1.319 1.714 2.069 2.500 2.807

24 1.318 1.711 2.064 2.492 2.797

25 1.316 1.708 2.060 2.485 2.787

26 1.315 1.706 2.056 2.479 2.779

27 1.314 1.703 2.052 2.473 2.771

28 1.313 1.701 2.048 2.467 2.763

29 1.311 1.699 2.045 2.462 2.756

30 1.310 1.697 2.042 2.457 2.750

31 1.309 1.696 2.040 2.453 2.744

32 1.309 1.694 2.037 2.449 2.738

33 1.308 1.692 2.035 2.445 2.733

34 1.307 1.691 2.032 2.441 2.728

35 1.306 1.690 2.030 2.438 2.724

Note: As n increases, critical values of Student’s t approach the z-values in the last line of this table. A common rule of thumb is to use z when n > 30, but that is not conservative.