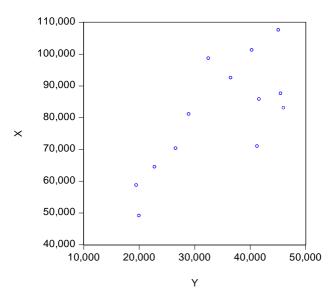
## **a.** 预期现金利息和税后利润的关系为正相关

## **b.**做 Y 对 X 的散点图



## **C.** 散点图与预期相符

## d.

| Variable   | Coefficient   | Std. Error   | t-Statistic          | Prob.  |
|--|---|--|----------------------|--|
| C<br>X   | 373.3014<br>0.419968  | 9530.379<br>0.115357   | 0.039170<br>3.640585 | 0.9695<br>0.0039   |
| R-squared Adjusted R-squared S.E. of regression Sum squared resid Log likelihood F-statistic Prob(F-statistic) | 0.546464<br>0.505233<br>6956.216<br>5.32E+08<br>-132.3764<br>13.25386<br>0.003884 | Mean dependent var<br>S.D. dependent var<br>Akaike info criterion<br>Schwarz criterion<br>Hannan-Quinn criter.<br>Durbin-Watson stat |                      | 34351.08<br>9889.466<br>20.67330<br>20.76021<br>20.65543<br>0.817346 |

e.

$$P(b_2 - 3.106 \frac{\hat{\sigma}}{\sqrt{\sum x_i^2}} \le B_2 \le b_2 + 3.106 \frac{\hat{\sigma}}{\sqrt{\sum x_i^2}}) = 0.99$$

$$P(0.061668213 \le B_2 \le 0.778267787) = 0.99$$

零假设值 0 落在接受区域以外, 拒绝零假设, 即认为现金利息与税后利润之间是相关的。