

Write:-

→ squared residual  
=  $[R_{\text{res}}]^2$

كوبن دكل ال  $X$  ومنظوم حسب ال  $S.R.$  →  
منزج كل  $X$  بعامود جديد →  
\* اذا كانه عن  $2X$  منفرد ببعين بعامود جديد  
\* اذا كانه عن  $3X$  ① منفرد الاول الثاني  
② الثاني \* الثالث  
③ الاول \* الثالث

\* اذا كانه عن  $4X$  : ① الاول \* الثاني  
② الثاني \* الثالث  
③ الثالث \* الرابع  
④ الاول \* الثالث  
⑤ الثاني \* الرابع  
⑥ الاول \* الرابع

→ Regression جديد  
→  $X$  : Residual squared.  
→ كل ال  $X$  الجار مع البكون :  $X$  القائم

→ chi-test:-

~~chi stat~~

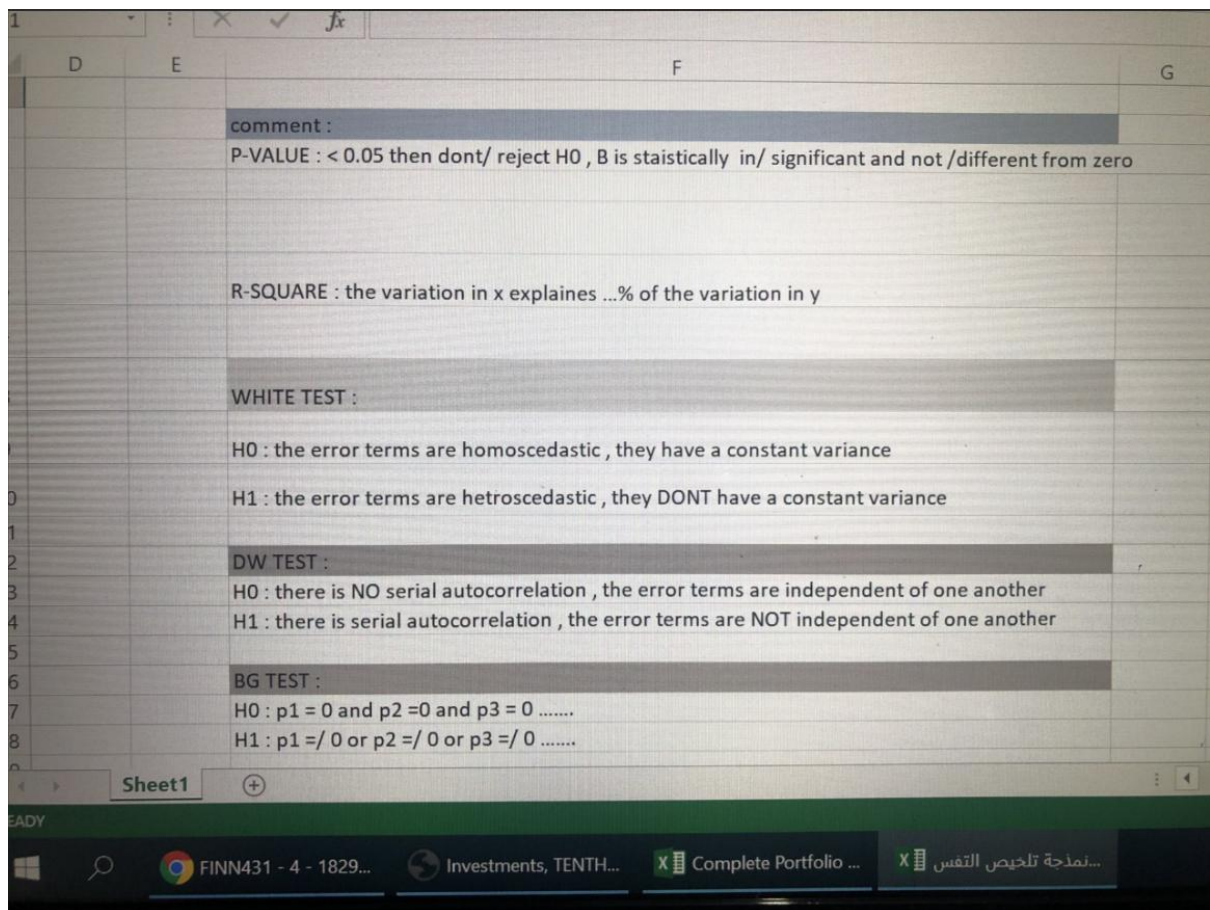
chi <sup>stat</sup> : =  $R^2 \text{ square} * T$  → obs. ال

chi critical :  $\text{chiSQ.INV}(0.05, \text{[ ]})$

Parameters ال  
intercept ال







H1 : the error terms are heteroscedastic , they DONT have a constant variance

**DW TEST :**  
H0 : there is NO serial autocorrelation , the error terms are independent of one another  
H1 : there is serial autocorrelation , the error terms are NOT independent of one another

**BG TEST :**  
H0 :  $p_1 = 0$  and  $p_2 = 0$  and  $p_3 = 0$  .....  
H1 :  $p_1 \neq 0$  or  $p_2 \neq 0$  or  $p_3 \neq 0$  .....

**NORMALITY TEST :**  
H0 : the error terms are normality distributed with skewness = 0 , and excess kurtosis = 0  
H1 : the error terms are NOT normality distributed with skewness  $\neq 0$  , or excess kurtosis  $\neq 0$

**auxiliary reg equation**  

$$(\hat{U}_t)^2 = \alpha_1 + \alpha_2^* + \alpha_3^* + \alpha_4^* + V_t$$

Sheet1

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Microsoft Excel - نمذجة تلخيص التفسير

HOME INSERT PAGE LAYOUT FORMULAS DATA REVIEW VIEW

Calibri 11 A A Wrap Text General Conditional Formatting Format as Table Cell Styles Insert Delete Format AutoSum Fill Clear

Font Alignment Number Styles Cells

H I J K L M N O P Q R S T U V

H0 :  $B_0 = 0$   
H1 :  $B_0 \neq 0$

**Consequences**

in general we could encounter any combination of 3 problems:

- the coefficient estimates are wrong
- the associated standard errors are wrong
- the distribution that we assumed for the test statistics will be inappropriate

Sheet1

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