| **Test** | **Pesaran CD Test** | **Durbin-Watson Test** |
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| **Summary Description** | Tests for cross-sectional dependence (correlation) in panel data. | Tests for serial correlation (autocorrelation) in the residuals of a regression model. |
| **Null Hypothesis** | No cross-sectional dependence (residuals are independent across individuals). | No serial correlation (residuals are uncorrelated). |
| **Threshold** | - p-value < 0.05: Reject the null hypothesis. | - DW ≈ 2: No autocorrelation. |
|  | - p-value ≥ 0.05: Fail to reject the null hypothesis. | - DW < 2: Positive autocorrelation. |
|  |  | - DW > 2: Negative autocorrelation. |
| **Interpretation** | If the null is discarded, there is evidence of cross-sectional dependence. | If the null is discarded, there is evidence of serial correlation in the residuals. |
| **Python Module** | linearmodels (for panel data) or custom implementation. | statsmodels |
| **Function Name** | linearmodels.panel.PanelOLS (custom CD test implementation needed). | statsmodels.stats.stattools.durbin\_watson |