

Lab 2, AI task: check what the AI wrote

(Write your answers in a Word document or on paper.)

A student gave a chatbot our fixed-effects and random-effects results and the Hausman test, and asked for the results paragraph. **It contains at least four mistakes.** Find them, say why each is wrong, and correct it. Use only our output and what you know: no chatbot.

Our output (year effects included, standard errors clustered by firm):

		Coefficient	Std. err.	t	P> t	
Pooled OLS	ai_firm	.3007456	.156736	1.92	0.055	R-squared 0.32
Fixed eff.	ai_firm	-.0517842	.0560016	-0.92	0.355	R-squared within 0.07
Random eff.	ai_firm	-.0162605	.0555056	-0.29	0.770	
Hausman test (FE vs RE): chi2(9) = 129.44, Prob > chi2 = 0.0000						

The AI's paragraph:

With firm fixed effects, adopting AI cuts financial expenses by 5.2 per cent, and the effect is statistically significant. Because the Hausman test rejects its null hypothesis, random effects is the preferred model, which confirms a significant negative effect. The within R-squared of 0.07 is much lower than the R-squared of 0.32 for pooled OLS, so pooled OLS explains the data better and should be preferred. Fixed effects control for all differences between firms, so the estimate is causal.

Your answers (two or three lines each):

1. Mistake 1:
2. Mistake 2:
3. Mistake 3:
4. Mistake 4: