Levy Clip 1 Transcript

DAN LEVY: All right, so let's start class today. So today the class is really putting together a couple of topics that are very important in the context of multiple regression. The topics are goodness of fit, which I know sounds like the brand of a yogurt, but it really is about this famous r square which we're going to discuss in a second. And the second topic is variance, or rather than variance, standard errors of OLS estimators.

We spent a lot of time so far in the last few classes trying to assess beta hat, and whether beta hat is unbiased, and so on. And today we're going to spend time understanding what determines the standard errors of estimators.

I want to say one more thing. As I said before, I have deliberately chosen not to use matrix algebra notation for teaching econometrics. That's a deliberate pedagogic choice. But I do recognize that some of you feel that you might need that in the future or want to do that, or want to be using that.

And so if you are in that category, appendix 1 has basically everything that we're doing in the course, but in matrix algebra. Normally API 210 uses matrix algebra, I'm not sure that this semester you will use it, but I did want to provide you with an appendix that gives you at least the translation between what we're doing and matrix algebra.

All right, so let's get started with goodness of fit, or the famous r square. And before we get started I want to ask you a question so I have a sense of pedagogic challenge in front of me today.

OK. Please vote. Even if it's to say E. I'm going to close it now and see where we are. OK.

So, there are about 35% of your who like the r square. And I want to prepare you for the possible emotional consequences of the next half hour, OK. I just want to be clear. We might be tempted to spend a lot of time on r square, but the second topic here is more

important. And I'm going to try to aim to reserve about 40 minutes for that topic here today. So let's get started with r squared first.