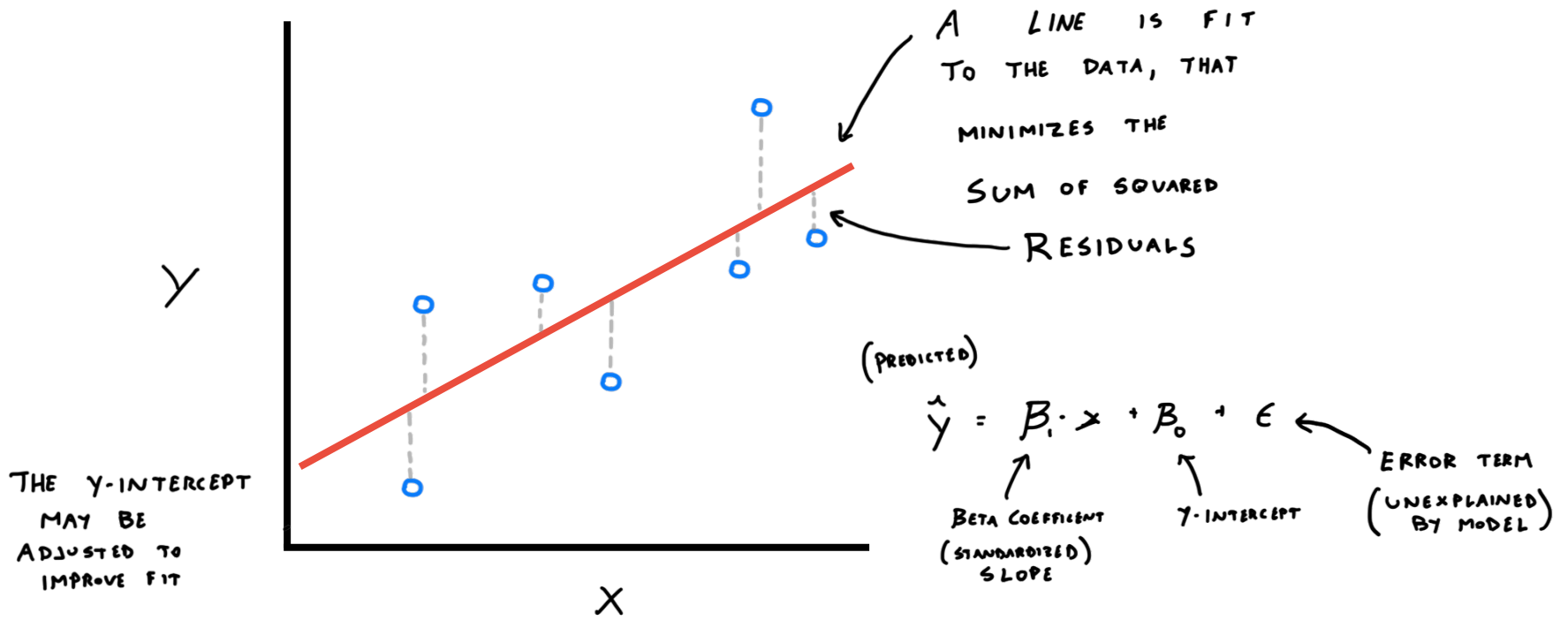
LINEAR REGRESSION

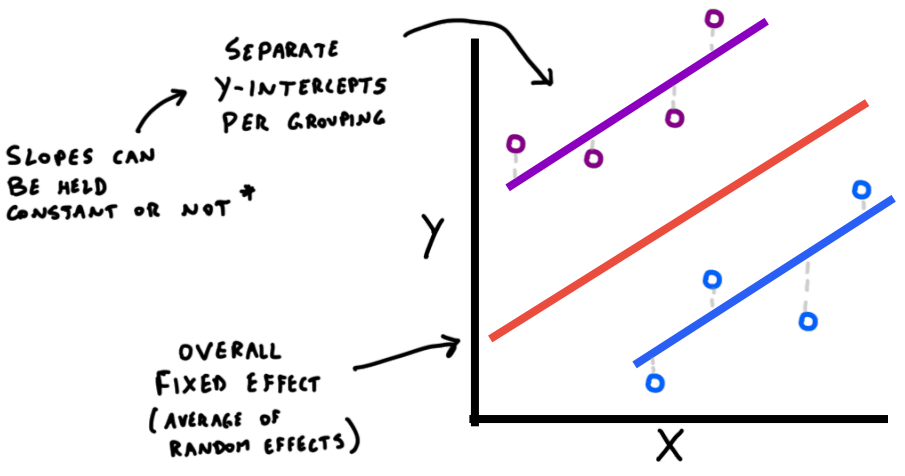


WHAT IF SAMPLES ARE NOT INDEPENDENT OF EACH OTHER ?

↓

PARTITION MODEL USING

RANDOM EFFECTS



* ADDITIONAL PARAMETERS

BETTER FIT ?
OR
OVERFIT ?

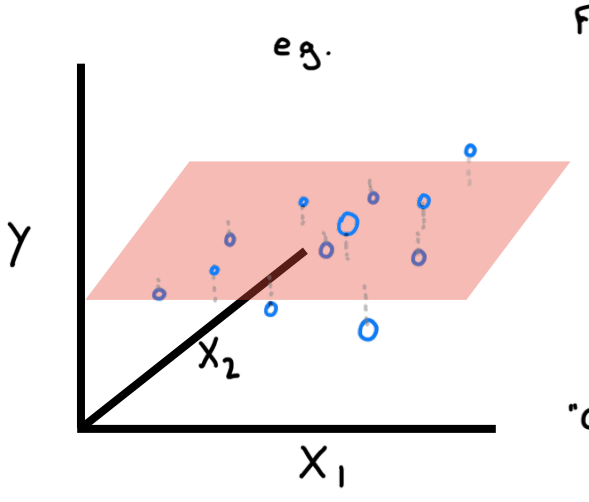
ENOUGH DEGREES OF FREEDOM ?
INTERPETABLE ?

WHAT IF WE WANT TO KNOW THE RELATIVE CONTRIBUTIONS OF MULTIPLE PREDICTORS SIMULTANEOUSLY ?

↓

BUILD A

MULTIVARIATE MODEL



FOR 2 VARIABLES,

MODEL FITS A "PLANE" OF BEST FIT,

WHICH ESTIMATES COEFFICIENTS SIMULTANEOUSLY

i.e. ADDING A SECOND VARIABLE WILL (LIKELY) IMPACT THE COFFICIENT OF THE FIRST VARIABLE

"CONTROL FOR"