

EMBEDDED METHODS

REGRESSION COEFFICIENTS



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$$y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_n X_n$$

The coefficients of the predictors (the β s) are directly proportional to how much that feature contributes to the final value of y

Coefficients in linear models depend on a few assumptions

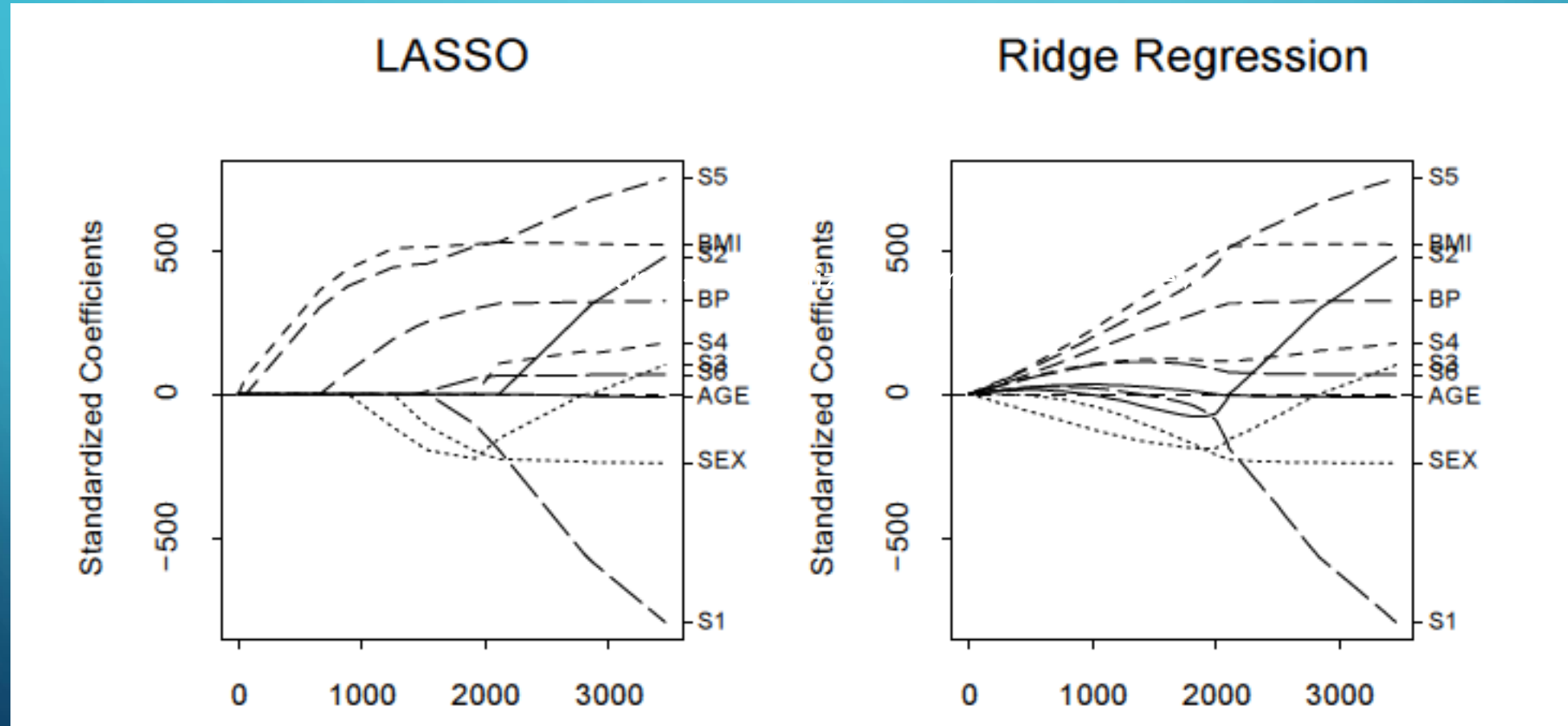
REGRESSION COEFFICIENTS



- Linear relationship between predictor (X) and outcome (Y)
- Xs are independent
- Xs are not correlated to each other (no-multicollinearity)

In addition, for direct coefficient comparison Xs should be in the same scale

CHANGE IN COEFFICIENTS WITH REGULARISATION



Least angle and ℓ_1 penalized regression: A review. Hesterberg et al. Statistics Surveys, 2008