EMBEDDED METHODS

REGRESSION COEFFICIENTS

REGRESSION COEFFICIENTS

$$y = \beta_0 + \beta_1 X_1 + \beta_1 X_1 + \ldots + \beta_n X_n$$

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

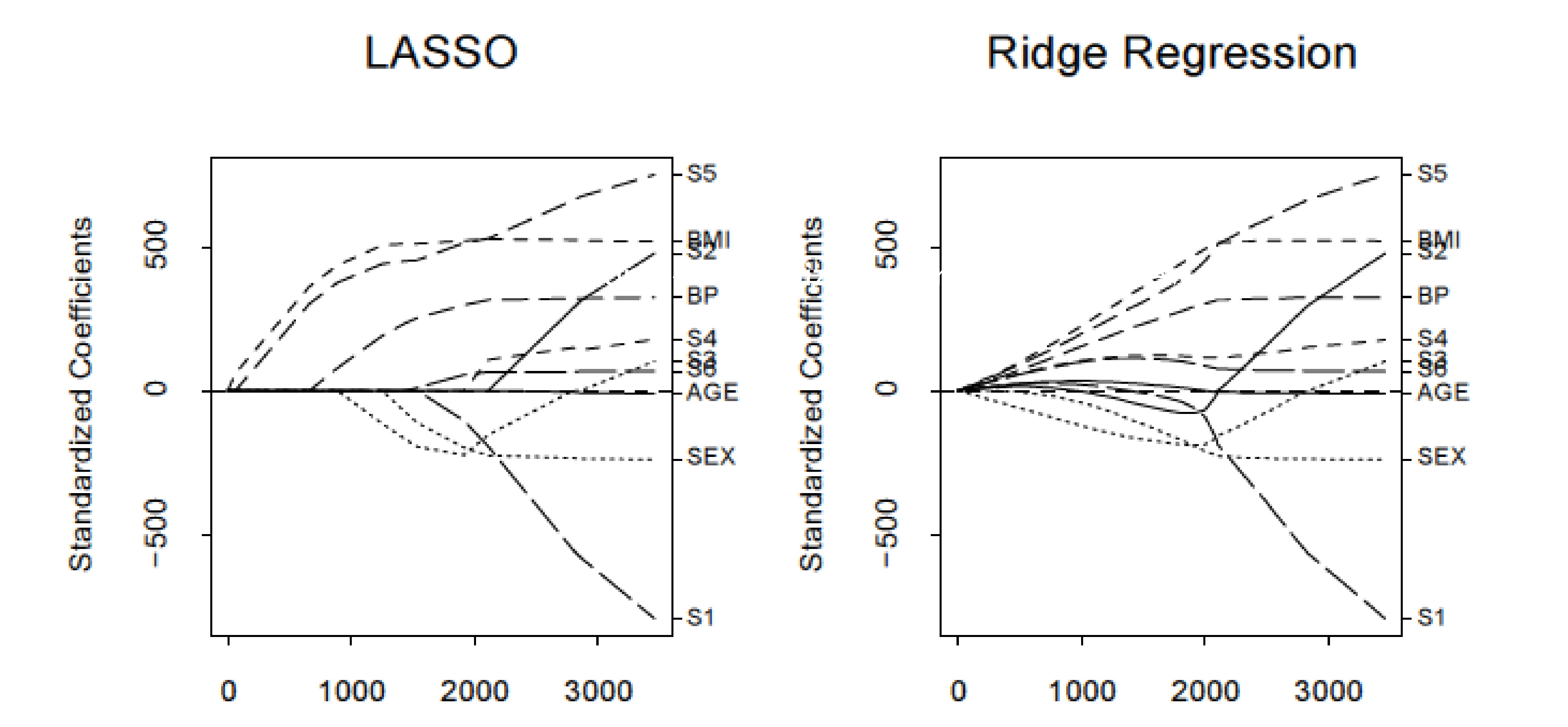
Coefficients in linear models depend on a few assumptions

REGRESSION COEFFICIENTS

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

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

CHANGE IN COEFFICIENTS WITH REGULARISATION



Least angle and ℓ1 penalized regression: A review. Hesterberg et al. Statistics Surveys, 2008