Multiple regression model

Slide 1

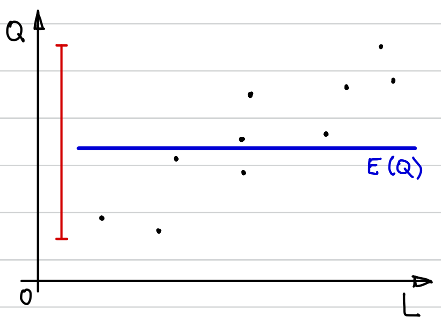
Dependent variable: y
Explanatory variables: x_j ; $j = 1, \dots, k$

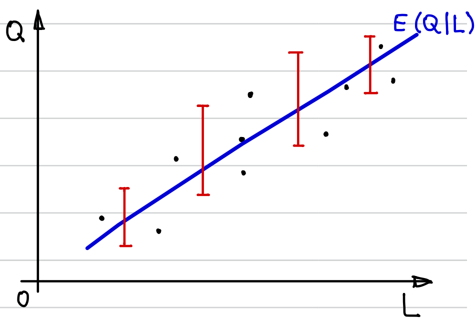
Slide 2

We distinguish between:
1) Time series (t);
2) Cross sections (i);
3) Panels (it).

Slide 4

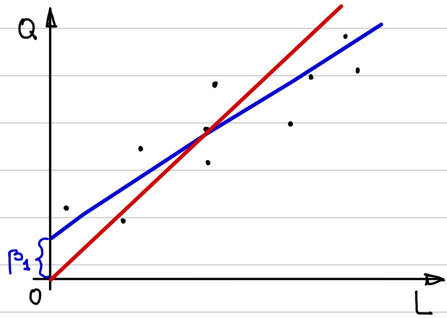
Conditioning: let us assume that $E(Q|L) = f(L)$.





Conditioning reduces variability of the measures.

Including a constant term (an intercept):



Slide 9

Slide 10

PRM	$E(y\|X)$	β	u
vs. SRM	$\hat{y}$	b or $\hat{\beta}$	e or $\hat{u}$

Keep in mind an example of a SRM, such as:

Slide 11

$$Q_i = \underbrace{b_1 + b_2 L_i + b_3 K_i}_{\hat{Q}_i} + e_i$$

(fitted values)