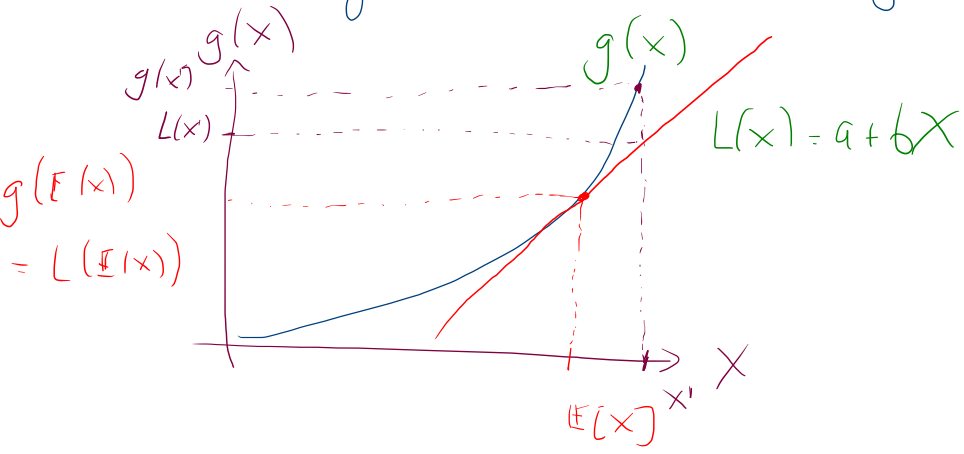
Si g convexa, ent $\mathbb{E}[g(x)] \geq g(\mathbb{E}[x])$



$$g(x) \geq L(x) \Rightarrow \mathbb{E}[g(x)] \geq \mathbb{E}[L(x)]$$

$$= \mathbb{E}[a + bX]$$

$$= a + b\,\mathbb{E}[X]$$

$$= L(\mathbb{E}(x)) = g(\mathbb{E}(x))$$

$$\therefore \quad \mathbb{E}(g(x)) \geq g(\mathbb{E}(x))$$